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CHEMICAL AND BIOLOGICAL WARFARE (CBW) AND  
INTERNATIONAL LAW



by

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A THESIS

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The undersigned certify that they have read, and  
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Abstract

The thesis will attempt to clarify the status of Chemical and Biological Warfare (CBW) in International Law. Preparations for such warfare by many countries are still in process despite the widespread belief that such means of warfare are "illegal" and immoral. For this reason, and perhaps others, it is necessary to determine the degree of validity and adequacy of the present and past international legislation or customs that try to "outlaw" or regulate Chemical and Biological (Bacteriological) Warfare.

Accordingly, the paper starts by attempting to answer to the question - Is a law of war necessary? The answer involves some of the many definitions of "war." This is followed by a brief description of the means of CBW. Against this background, the position of the law governing the use of CBW in relation to the total scheme of the International Law of War is also examined. In addition, as a matter of comparison, the moral aspects of, and the military necessity for the employment of CBW agents are analyzed, while the concluding chapter deals with the prospects of "outlawry" of CBW.



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Abbreviations

A.A.A.S.	American Association for the Advancement of Science
A.C.	Appeal Cases (Great Britain) 1891 -
A.J.I.L.	American Journal of International Law, 1907
App. Cas.	Appeal Case (Great Britain) 1875-90
Ariz.	Arizona
B.Y.I.L.	British Yearbook of International Law
ch	Chancery Reports (Great Britain) 1891
Cmd	Command Papers (Great Britain) 1919-56
Cmnd	Command Papers (Great Britain) 1957 -
C.B.W.	Chemical and Biological (Bacteriological) Warfare
CB agents	Chemical and Biological agents
CS	United States and United Kingdom Military Code for a riot gas
BZ, CN, DM,	United States Military Codes for riot gases
Doc	Document
DRVN	Democratic Republic of Vietnam
E.N.D.C.	Eighteen Nation Disarmament Committee
I.C.J. Rep.	International Court of Justice Reports, 1947 -
I.C.R.C.	International Committee of Red Cross
I.Y.I.A.	Indian Yearbook of International Affairs
G.L.J.	Georgetown Law Journal
I.C.L.Q.	International and Comparative Law Quarterly, 1952
K.B.	King's Bench Reports (Great Britain) 1901-52
LN	The League of Nations





M.L.R.	Military Law Review
N.F.L.	National Liberation Front
N.Y.	New York
P.C.I.J.	Permanent Court of International Justice
R.V.N.	Republic of Vietnam
S.E.A.T.O.	South East Atlantic Treaty Organization
Series A	P.C.I.J. judgments and orders, 1922-30
Series A/B	P.C.I.J. Advisory opinions, judgments and orders, 1931-40
Series B	P.C.I.J. Advisory opinions, 1922-30
T.I.A.S.	Treaties and other International Acts Series (United States), 1950
U.A.R.	United Arab Republic
U.N.	United Nations
U.N.G.A.	United Nations General Assembly
U.N.W.C.C. (Law Reports)	United Nations War Crimes Commission, Law Reports of Trials of War Criminals, 1947-49
U.S.	United States Supreme Court Reports, 1875 -
W.H.O.	World Health Organization
W.L.R.	Wisconsin Law Review
Y.L.J.	Yale Law Journal



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## INTRODUCTION

While an effort is made to bring nuclear warfare under the control of international law and organization, the legal status of CBW has rightly demanded a redefinition. Preparation of the agents of CBW is carried on by many countries - notably the Soviet Union, United Kingdom, Canada, China, Taiwan, France, the Federal Republic of Germany, Poland, Sweden, Spain, the United Arab Republic, Cuba, Isreal, South Africa and the United States of America - despite a widespread belief that such preparations are immoral and illegal.

The conviction exists among the more optimistic proponents of nuclear arms control and disarmament that in as much as chemical and biological weapons have been fully "outlawed," the total prohibition of nuclear warfare is equally feasible and ought to be achieved. The validity of this belief, that CBW is definately outlawed, the implications for nuclear warfare drawn from that assumption, and the view of the nature of the international law of war, which generally underlines this position, are all in need of close scrutiny.

Secondly, the legal status of CBW has substantive value as a case study in the international legislative process. Unlike, say, nuclear warfare, CBW has been dealt with



explicitly in a number of international agreements. At the same time, the existence of a body of customary law on this subject has been the centre of controversy in many official statements, authoritative texts, and in the comments of many notable public figures. In addition to this, the study of the legal status of CBW raises further questions regarding the effect of international legislative agreements on non-adherents, the effect of reservations to such agreements, the establishment of customary international law, the normative validity of such principles, and finally the exercise of the right of reprisal which most nations give as their main reason for the extensive research on, and preparation of, the agents of CBW. While it is not possible to look into the above extensively, it is however necessary that, in the analysis of the present legal status of CBW, a certain familiarity with the fundamental principles governing the law of war in general be presumed.

The fact that the killing, maiming and incapacitating effect the CBW agents have on populations (especially on the old, the sick, and the young) is tragic, and that these agents cause economic, environmental, and ecological problems such as devastation of staple crops and reduction of soil fertility may make humanitarian reasons for outlawry of CBW overshadow the military need for retaining and stockpiling CBW agents. The Geneva Protocol of 1925 has been the



most successful of all multilateral treaties in regulating CBW. It has also been the most contentious.

If there is an effective law of war it should regulate or at best control wars including CBW. However, one can not omit the fact that each state is judex in causa sua, and has a right of auto-interpretation of international law. For example, nations, especially the world powers, have used their individual discretion in including or excluding chemicals that fall under the purview of "other gases" (English) or "similaires" (French) in Article 5 of the 1925 Protocol. This discretion weakens the binding force of any law under general international law, and the law of war is no exception. Is this alone sufficient to regard the law of war as unnecessary?





## Chapter I

### IS A LAW OF WAR NECESSARY?

It is almost inconceivable that a nation contemplating a declaration of war will be prevented from doing so by conventional limitations on the use of force agreed to by such a nation. Why, then, should attention be paid to the Laws of War? Schwarzenberger rightly gave the answer when he held that:

Rules of warfare are intended to impose some limits however ineffective, to a complete reversion to anarchy, by the establishment of minimum standards on the conduct of war.<sup>1</sup>

So, while the rules of the law of nations respecting warfare may not absolutely "outlaw"<sup>2</sup> war, they could, through customs and treaties, permit some weapons of warfare, while forbidding others, in order to mitigate unnecessary civilian sufferings and deaths during war.

The proportion of persons engaged in a battle who were killed or wounded during the Middle Ages was 30 to 50 per cent of those engaged in fighting. In the sixteenth century 40 per cent of the defeated side might be killed or wounded and about 10 per cent of the invading soldiers.<sup>3</sup> Air raids were serious during the first World War but they did not kill as large a proportion of the civilian population as were killed in the sieges of the Thirty Years' War.<sup>4</sup> And an even greater proportion was killed in the destruction of Dresden by air raids in 1943, and of Hiroshima and Nagasaki



by atomic bombs in August, 1945.<sup>5</sup>

The rules of warfare started to evolve during the later part of the Middle Ages, when wars were conducted with great cruelty and inhumanity.<sup>6</sup> The Thirty Years' War, for example, was, unsparingly, a cruel war, cruel enough to inspire Grotius to make the Grotian doctrine of Temperamenta belli a landmark in progress towards limiting the cruelty of war.<sup>7</sup> Later, in the fifteenth, sixteenth, seventeenth and eighteenth centuries, the influences of Christianity and chivalry played a great part in modifying such barbarous practices as the killing and torture of prisoners and the sacking of towns by assault.<sup>8</sup> While the Christian influence was slow in asserting itself, chivalry demanded a "certain fairness in offence and defence, and a certain mutual respect between opposing forces independent of the needs of victory."<sup>9</sup>

In addition to the influences of Christianity and chivalry, the Grotian call to "humanise" war and the powerful humanitarian movements like the International Red Cross founded in Geneva in 1863<sup>10</sup> encouraged the partial codification of the laws of war from the eighteenth century to the close of the Napoleonic Wars, and from 1850 to the outbreak of the First World War.

At this point, it is perhaps necessary to make a





brief distinction between the factors that, in one way or another, affected the rules of warfare.

First when states in Europe set up certain standards and traditions of military usages and customs to be followed on the battlefields by their standing armies, they were really setting up rules of warfare.

The second was the growth of popular nationalism which, to a great extent, defined military objectives in national terms, thus repressing private motives of warfare.

The third factor was the progress in military organization in the nineteenth century. This encouraged each military power to begin keeping up-to-date manuals of military warfare for the guidance of its armed forces.<sup>11</sup>

From these three developmental factors, it could be said that states established the "usages" in warfare, or milder practices in warfare in order to satisfy some humanitarian ideals while, at the same time, safeguarding the sovereignty of their nations. These military "usages" or usus in bello later became parts of legal treaties and accepted customs of warfare. The greatest need for the laws of war, therefore, seems to emanate from the necessity to secure some conciliation between the necessities of war with the laws of humanity.<sup>12</sup>



In light of the functions of war, and the necessity for the law of warfare, Schwarzenberger has classified the rules into four types.<sup>13</sup>

The first type of rule of warfare curbs the excesses of the belligerents' "sadistic acts of warfare" or "wanton acts of destruction."<sup>14</sup> Such "devastation not justified by military necessity"<sup>15</sup> was regarded as a war crime, which received the attention of the international military tribunals of Nuremberg (1946) and Tokyo (1948). The trial in 1474 of Peter von Hagenbach<sup>15a</sup> may be considered as a forerunner of the war crime trials of 1945 and 1946.

The second deals with degrees of violence not acceptable to civilization in the process of overpowering the enemy. For instance, the prohibition of "the use of poison and poisoned weapons" was instigated because of their "excessive inhumanity"<sup>16</sup> while the use of "arms, projectiles, or material of a nature to cause superfluous injury" should be avoided because of their "treacherous character."<sup>17</sup>

The third is the rule against inhumanity in warfare. Thus, in the St. Petersburg Declaration of 1868, parties to the Declaration, while prohibiting the use of explosives or inflammable projectiles below 400 grammes in weight, also decided that, in case of weapons below that weight, the "necessities of war ought to yield to the requirements of



humanity."<sup>18</sup>

The fourth is purely an admonitory type of rule of warfare. It attempts to seek a compromise between the standards of civilized nations and the necessity of war, or the requirements of national interest. In this case, a country may make some reservations, thereby restricting the validity of the treaty. Such reservations attached to the rule are in law "illusory"<sup>19</sup> because they are hardly verifiable. The reservations in war treaties clearly imply, if not expressly, that the standards of civilization will only be maintained as far as they do not conflict with military necessity. While the third type of rule is somehow specific as to permissible weapons of warfare, the fourth regards "military necessity" as an essential aspect of law of war. The reservations found in the Geneva Conventions 1949 (I - IV) or the Geneva Protocol of 1925 may be military safeguards in event of a possible war. The impetus for the fourth rule of warfare stems from the threat systems. In the Protocol of 1925, for example, the reserving country has the right to retaliate in kind against another country that employs CB agents in warfare.

The first three types of rule seem to lay greater emphasis on humanity than on national interest or military necessity. They do this by imposing some restraint on belligerents and by drawing boundaries between the legitimate pursuit of victory and the infliction of suffering unnecessary



for victory. But the ways and means of inflicting harm on civilians change with time. The modern era of aircraft, atomic weapons and long distance guided missiles, and silent weapons of CBW accelerate a transformation already well advanced in the technological conditions of modern warfare. As a result, these complex weapons of warfare have depersonalized the process of inflicting death and injury by interposing distance and mechanical contrivances between the actor and the horror he perpetrates on his victims. In effect, technological advancement has expanded beyond expectations of the Hague Conferences, the deaths,<sup>20</sup> injuries and devastations which can be inflicted by a single act of warfare.

For this reason alone, the laws of war are not only necessary, but they require revision from time to time,<sup>21</sup> in order to maintain some sense of common humanity during warfare.

It is not only the depersonalization of violent actions by technological change that has made the law of war difficult to maintain. Other factors, such as nationalism and fanatical identification of national groupings with politico-economic ideologies which always tend to bring assault on the very principle of humanity. Many nations go into wars in neglect of the human consequences in order to safeguard their sovereignties. Under such circumstances, suffering and death become inevitable, and a call for resort





to the temperamenta belli becomes the paramount objective of the law of war. Stone has put it well when he said:

It is important for the law [of war] to occupy itself with those who must die or suffer in modern war: but the prime objective of the temperamenta belli must still concern itself with those many who can by realistic thinking, be saved from such a fate.<sup>22</sup>

Despite the ethical merits of the laws of war, it is evident that to understand the laws of peace in the international system of power politics, the laws of war and neutrality must be understood as well. It is necessary to be able to distinguish the boundaries between peace, war and the intermediary between peace and war - "status mixtus" - if it really exists.

Perhaps M. de Martens' illustration explaining the reason for the 1899 Hague Conference is the best way to answer the question: Is the law of war necessary? M. de Martens said:

. . . in order to clearly express what is, the view of this Conference . . . I cannot find a better illustration than that of a "Mutual Insurance Society against the abuse of force in time of war." Well, gentlemen, one is free to participate or not in a Society, but for its existence Statutes are necessary. In such Insurance Societies as those against fire, hail, or other calamities the Statutes which anticipate such disasters do not legalize them, but state existing dangers. So it is that in founding by common agreement the "Society against the abuse of force in time of war" with the object of safeguarding the interests of populations against the greatest disasters, we do not legalize the disasters: we only state them. It is not against the necessities of war,



it is solely against the abuse of force that we wish to provide a guarantee.<sup>2 3</sup>

M. de Martens' explanation appears to provide a sufficient reason for the unique character of the Conventions (1899 and 1907). In essence, they laid down certain limits for the purpose of modifying as far as possible the severity of wars.<sup>2 4</sup> The place of "law" in "war" requires some clarification if the law of war should serve its purpose.

#### The Place of Law in War

Many military manuals, legal writers, statesmen, judges and treaties have defined "war" in diverse ways. Some of those who have attempted the definition have regarded "war" as an act, or a series of acts of violence or a dispute between governments carried on by violence. Olivart, for example, defines "war" as:

. . . the litigations between nations which are defending their rights, and in which force is the judge, and victory serves as the judgment,<sup>2 5</sup>

while Phillimore regards it as:

. . . the exercise of the international right of action, to which, from the nature of the thing and the absence of any common tribunal, nations are compelled to have recourse in order to assert and vindicate their rights.<sup>2 6</sup>

Lord Ellenborough C.J. appears to agree with these definitions when in the case Blackburne v. Thompson (1812)



15 East 81, he said, "it belongs to the government of the country to determine in what relation of peace or war any other country stands towards it; and that it would be unsafe for Courts of Justice to take upon them without that authority to decide upon those relations." Lord Ellenborough later added:

But when the Crown has decided upon the relation of peace or war in which another country stands to this, there is an end of the question: and in the absence of any express promulgation of the will of the Sovereign in that respect, it may be collected from other acts of the State.<sup>27</sup>

Such definitions that regard the declaration of war as the responsibility of the government, or that regard "war" itself as a contest or contention carried on by force between governments, neglect acts by individuals against the legal government, or by a government against individuals as in "reprisals" or rebellions.

"War"<sup>28</sup> may also be considered as a condition or period of time in which special rules permitting and regulating violence between governments prevail. Grotius, for example, regards "war" as "the state of persons contending by force as such."<sup>29</sup> In this legal context, it may also be a procedure of regulated violence by which disputes between governments are settled.

To most writers, including Grotius, "war" is a conception described by various abstract terms signifying exis-





tence in time, such as "state," "condition," "relation," "situation," and this can be emphasized by the use of the term "state of war."

Practical military men, unlike the legal writers, take "war" to be nothing more than a series of acts aimed at occupation of the enemy's territories, destruction of his military forces and perhaps eventual reduction of him to complete submission. Hobbes described the "nature of war" this way:

As the nature of foul weather lieth not in a shower or two, or rain but in an inclination thereto of many days together; so that the nature of war consisteth not in actual fighting, but in the known disposition thereto during all the time there is no assurance to the contrary.<sup>30</sup>

Though Hobbes' explication of the "nature of war" is difficult to apply at all times, it emphasizes that "war" does not constitute only actual fighting but also the absence of peace. Different types of wars of our age - the Cold War, arms races, the violence associated with decolonization, or insurgency, and counterinsurgency - may find place in Hobbes' definition of "war."

It seems that the "act of war" or "the state of war" characterizes the material, psychological and legal senses respectively. Does it mean that "war" itself is legal? What do some international agreements regard as "war"? To be able to attempt an answer, it is necessary to have a cursory look



at some treaties that aimed at barring war as an instrument of national policy, or at limiting the rights of nations to declare wars. For example, to what extent did the Covenant of the League of Nations (1918), the Kellogg-Briand Pact (1928), the Pact for the Renunciation of War as an Instrument of National Policy (1928), the Charter of the International Military Tribunal (1945), the Charter of the United Nations (1945), the Draft Covenant of Human Rights (1948), succeed in achieving the objectives of the drafters in relation to the legal status of "war"?

Did these treaties agree, both on paper and in practice, on the legal status of "war"? Though these attempts might be said to have had success on paper, they became highly problematical for future military practices.<sup>31</sup> For example the Kellogg-Briand Pact for the renunciation of war as an instrument of national policy was supposed to outlaw "war," but it did not explicitly declare acts of war-mongering as criminal, and, in addition, the United States, and other states reserved the right of self-defence, including the right to determine when the occasion for self-defence arose.<sup>32</sup>

The Covenant of the League of Nations made mention of "war" in Article 16 of its Covenant:

Should any Member of the League resort to war in disregard of its covenant . . . it shall ipso facto be deemed to have committed an act



of war against all other Members of the League.<sup>33</sup>

What the Covenant apparently looked toward was the creation of a formal "state of war" between the state violating its obligations and such members as chose to oppose it with armed force under Article 16. In such a case, it seems clear that each state participating would be bound by the generally accepted laws of war as well as by those conventions and treaties dealing with the laws of war to which it had agreed.<sup>34</sup> Notwithstanding Article 16 of the Covenant of the League, there are consequently cases in which states were entitled to resort to war or to use the euphemistic language of Article 15, paragraph 7 of the Covenant, "to take such action as they shall consider necessary for the maintenance of right and justice." This paragraph permitted a member to resort "to measures of self-help, reprisal or self-defence should it have considered such action necessary for the maintenance of right and justice."<sup>35</sup> This was on the condition that the Council was unable to reach a compromise on the dispute. When actually would the Council be deemed to have failed and when would a member regard it necessary to resort to the permitted "measures of self-help, reprisal or defence"? The answers to these questions are subjective and depend on each member's assessment of every situation. Article 16 only indicated when a collective action should be taken against a state which resorted to war other than "in the circumstances



permitted by the Covenant."

It was in 1927 during the discussion on the dispute between Poland and Lithuania that the question of the legality of the "state of war" came up before the League. The facts of the case are summarized as follows: On October 9, 1920, a Polish army, commanded by the "rebel" General Zeligowski, drove the Lithuanians out of the city of Vilna, which was claimed by them as their capital. This coup de main was a flagrant violation of the Armistice Agreement which the Polish and Lithuanian representatives had signed two days previously at Suwalki under the auspices of a Military Commission appointed by the Council of the League. Under the terms of that agreement, all hostilities were to cease and a temporary line of demarcation was drawn, leaving Vilna on the Lithuanian side. On March 15, 1923, the Conference of Ambassadors assigned both the city and territory of Vilna to Poland. Lithuania, however, disputed the jurisdiction of the Conference of Ambassadors, refused to accept the award and, as she had done since 1920, continued to protest against the occupation. She declined to establish diplomatic relations with Poland, to open the frontiers to road and rail traffic or to maintain postal, telephone and telegraphic communications. While publicly declaring that they had no intention of attempting to retake Vilna by force, successive Lithuanian governments maintained that a "state of war" existed between





the two countries.<sup>36</sup>

In December 1927, the League Council examined the complaint submitted by the Lithuanian government - in which Poland was accused of oppressing the Lithuanian minority in the territory of Vilna and of threatening the very existence of Lithuania as an independent country. The Polish representative, M. Zaleski, declared that it seemed to him

. . . impossible to enter into a detailed examination of the charge made by the Lithuanian government . . . so long as that government maintains its point of view that a state of war exists between Lithuania and Poland.<sup>37</sup>

The Polish Government considers that this attitude is scarcely compatible with Lithuanian position as a member of the League of Nations [and it] hopes that the Council will recognize that this attitude is at variance, not only with the spirit of the League's Covenant, but with its very objective, which is to "promote international co-operation" and "achieve international peace and security."<sup>38</sup>

When M. Voldemaras, the Lithuanian delegate replied, he did not refute the Polish assertion; he brought additional arguments to reinforce that assertion. He also admitted that successive governments of Lithuania had certainly used the expression "state of war," at the same time, however, stressing that:

. . . in their use of it, they have always contemplated nothing more than the absence of normal relations between the two countries. There are many other countries which maintain no mutual relations, sometimes for decades.



No one speaks of a "state of war" in the sense which people seem to wish to impute to that expression, that is, there is a threat of hostilities, a threatened outbreak which may involve Europe or even the world.<sup>39</sup>

At the end of the long deliberations, the Council unanimously adopted a resolution which opens with the words:

The Council of the League of Nations declares that a state of war between two Members of the League is incompatible with the spirit and the letter of the Covenant, by which Lithuania and Poland are bound: Take note of the solemn declaration made by the Lithuanian representative that Lithuania does not consider herself in a state of war with Poland and that in consequence peace exists between their two respective countries.<sup>40</sup>

From the above resolution of the League, it follows that the Council held that the existence of the state of war was incompatible with the Covenant of the League. In addition, it refused to accept the fact that there might be the existence of an intermediate state between war and peace or a status mixtus as it is generally called. The Council resolution was the subject of argument and counter-argument before the Permanent Court of International Justice when it was asked by the Council in 1931 to give an advisory opinion on the question of whether the "international engagements in force oblige Lithuania in the present circumstances, and if so, in what manner, to take the necessary measures to open for traffic . . . the Landwarow-Kaisiadorys railway sector."

Justifying her refusal to permit rail traffic through



the sector, the representatives of Lithuania argued before the Court that in its resolution of 1927, the League Council had not referred to "normal peace"<sup>41</sup> in the "sense of international law" but to peace of "a particular nature" which may be called "an intermediary state between war and peace."<sup>42</sup> Poland, as one would expect, rejected this interpretation maintaining that "a normal peace" was intended since international law recognizes only a state of war or of peace, and does not recognize a state of "quasi war."<sup>43</sup> In the advisory opinion of the Court, there is no mention of an intermediary state between peace and war as defined by Lithuania. The opinion was in fact based on the assumption that there was peace between Lithuania and Poland, and not the "status mixtus."

The charter of the United Nations, unlike the Covenant of the League of Nations makes no mention of the word "war." Rather it looks towards "preventive" and "enforcement" action by the United Nations.<sup>44</sup> Furthermore, it provides for a potentially more centralized military force than would have been available to the League by outlining in Article 43<sup>45</sup> a procedure under which armed forces are to be made available for such use as permitted by the Charter. It also makes provision for a centralized staff and planning in Article 47. The charter also prohibits the use of armed force in all but two cases - namely, "self-defence" against "armed





attack" under Article 51, and action "in the common interest," necessary "to maintain or restore international peace and security" under the Preamble and Article 39 of the charter. Unlike the draftsmen of the Kellogg-Briand Pact of 1928, the authors of the charter deliberately refrained from using the term "war"<sup>46</sup> preferring the expressions "armed force"<sup>47</sup> and "the threat or use of force."<sup>48</sup>

The prohibition of the use of force, however far-reaching it may be, provides no guarantee against infringement by one or more states. The possibility cannot be excluded, therefore, that even within the framework of an international organization like the United Nations, hostilities may break out between member states or between members states and non-members. When such hostilities arose, it had been the economic interests and ideological factors which form part of the national interests of member states, especially the permanent members of the Security Council, that determined what line of action the United Nations would take.

The Congo Crisis is one of the classic examples. When the Congo was threatened with the secession of her Katanga Province, the Security Council met and adopted a resolution by nine votes to nil (Britain and France abstaining). This insisted on an immediate end "to the secessionist activities illegally carried out by the Provincial Administration of Katango,"<sup>49</sup> and further authorized the Secretary-General



. . . to take vigorous action, including the use of requisite measures of force, if necessary, for the immediate apprehension, detention pending legal action, and/or deportation of all foreign military and paramilitary personnel and political advisers not under the United Nations command, and measures as laid down in paragraph A-2 of the Resolution of February 21.<sup>50</sup>

Not very long after this mandate, the Secretary-General, Dag Hammarskjöld, had reason to complain that the Soviet Union and Belgium were intervening unilaterally, and that the Council must request that all assistance be channelled only through the United Nations Congo operations. The Congo operation was not the first incident of a definite resort to arms with which the Security Council was confronted. The first occurred in 1947, when the Netherlands went into a "police action" against the Republic of Indonesia. The Council established "a committee of Good Offices," after a Council resolution which made no mention of a "breach of peace" or "threat to international peace." And "at no time during its considerations of the Indonesian case did the Security Council find that war or any other breach of the peace necessitating enforcement measures had occurred."<sup>51</sup>

This situation was viewed differently from the Congo, or Korea crisis, where the Council was convinced that "a threat to international peace" had occurred and therefore demanded United Nations action. It would appear that, in pursuant of the charter of the United Nations, international



military operations are not formally designated as "war," in fact, they are expressly said to be something else. This leaves room for differences on when there is "peace," "a state of war," "a de facto war" or "a status mixtus," and their legal consequences, under the charter of the United Nations.<sup>52</sup>

Like most legal writers and philosophers, the League, Kellogg-Briand, and the U.N. Charter designate "the absence of peace" with different terms. While these international agreements disagree on what actually constitutes "the absence of peace", they make adequate provisions for the rights of member States to wage wars, when peace no longer exists. Realizing that the human consequences of cruel wars are usually great, a more humane waging of such wars as CBW, and nuclear wars become the major objectives of a certain Convention or declaration like the Saint Petersburg Declaration of 1868, the Hague Conventions of 1899 and 1907, the Geneva Protocol of 1925 and the Geneva Red Cross Conventions of 1929 and 1949. Some of them impose limitations on weaponing; for example, the Saint Petersburg Declaration of 1868 induced parties to denounce the use of projectiles of a weight below 400 grammes which are either explosive or charged with fulminating or inflammable substances, while the Hague Regulations prohibit the use of poison and poisoned weapons, the Geneva Protocol disallows "asphyxiating, poisonous or other





gases and of all, analogous liquids, materials or devices"<sup>53</sup> and the use of "bacteriological methods of warfare."<sup>54</sup> Others like the Geneva Conventions of 1949 (I - IV) demand adequate medical attention to the wounded and sick in the Armed Forces whether in the field (First Convention) or at sea (Second Convention), and humane treatment of prisoners of war (Third Convention) and protection of civilian persons in time of war (Fourth Convention).

In practice the signatories to these Conventions regard "considerations of humanity" or "requirements of civilization" expedient only to the extent that the military necessity allows. For example, the protection of "civilian" population was abstracted by the nuclear bombing of populous cities during the Second World War. In a similar vein, nations within or outside the Protocol of 1925 have continued to manufacture and store prohibited gases and bacteriological agents. The reason is advanced that non-parties to the Protocol are bound only by customary international law, and not by treaty and may use these weapons against parties to the Protocol. They (parties to the Protocol) need these weapons in individual self-defence, reprisals, or in certain exceptional circumstances or in self-preservation or in hot pursuit.<sup>55</sup>

Before analysing the legal limitations of these major treaties banning CBW, it is necessary to have a cursory look





at the history of the use of CB agents in war, and some of the CB agents used, manufactured or stored by nations.



## Footnotes to Chapter I

<sup>1</sup>G. Schwarzenberger, International Law, vol. II: The Law of Armed Conflict (London: Stevens and Sons, 1968), p. 10

<sup>2</sup>Julius Stone, Legal Controls of International Conflict (London: Rinehart & Co. Inc., 1954), p. 23

<sup>3</sup>Q. Wright, A Study of War (Chicago: University of Chicago Press, 1964), p. 59

<sup>4</sup>Ibid., p. 60

<sup>5</sup>Some 300,000 people died in these cities - Dresden, Nagasaki, Hiroshima. Ibid.

<sup>6</sup>L. Oppenheim, International Law: A Treatise, ed. by H. Lauterpacht, vol. II, 7th ed. (London: Longman's, 1952), p. 226

<sup>7</sup>Stone, Legal Controls, p. 335

<sup>8</sup>Oppenheim, International Law, p. 226

<sup>9</sup>Stone, Legal Controls, p. 337

<sup>10</sup>With the support of some noble-hearted citizens of Geneva, the Red Cross was founded in 1863, and its committee brought together the diplomats of 16 states, who adopted the Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. See Jean S. Picket, "The Development of International Humanitarian Law," in International Law in a Changing World (New York: Oceana Publishers, Inc., 1963) p. 116

<sup>11</sup>The first Manual issued was the Instructions of the Government for the Armies of the United States in Field, drafted by Frances Lieber in 1863. This was superseded by the Rules of Land Warfare in 1914 after the 1907 Convention. The German Kriegsbrauch in Landkriege appeared first in 1902; the British Manual of Land Warfare was first issued in 1908, and the French Les Lois de la Guerre Continentale, also in 1908. Stone, Legal Controls, pp. 336-337



<sup>12</sup>The Declaration of St. Petersburg of December, 1868. See A. Pearce Higgins, The Hague Peace Conferences (Cambridge: Cambridge University Press, 1909), p. 5.

<sup>13</sup>Schwarzenberger, International Law, p. 11.

<sup>14</sup>Ibid.

<sup>15</sup>Art. 6(b) of the Charter of the International Military Tribunal of Nuremberg in Cmd. 1919-56, 668 (1945), p. 5.

<sup>15a</sup>When Duke Charles of Burgundy took over the Austrian possessions on the Upper Rhine, including the fortified town of Breisach, he installed Peter von Hagenbach as the Governor or Landvogt, of the territory. Hagenbach in trying to reduce the citizens of Breisach to a state of submission used all sorts of devices including murder, rape, illegal taxation and wanton confiscation of private property and victims of his terror included inhabitants of neighboring territories. Charles was defeated and killed in the war. The Allies seized and tried Hagenbach for war crimes. The proceedings at the trials have relevance to the post 1945 war crime trials and in fact the defence of superior orders. See G. Schwarzenberger, International Law, V. 2, pp. 462-466, 517.

<sup>16</sup>Art 23(a) of the Hague Regulations 1907. See A. Pearce Higgins, The Hague Peace Conferences (Cambridge: Cambridge University Press, 1909), p. 235.

<sup>17</sup>See i) Art. 23(e) of the Hague Regulations 1907, Ibid.

ii) Geneva Protocol of June 17, 1925, prohibits "the use in war of asphyxiating, poisonous or other gases and of all analogous liquids, materials or devices or of bacteriological methods of warfare." See Cmd. (1930), 3604.

<sup>18</sup>Preamble to the St. Petersburg Declaration, 1868.

<sup>19</sup>Judge Lauterpacht's separate opinion in the Norwegian Loans Case (I.C.J.) Reports, 1957, p. 50-54. See also L.C. Green, International Law Through the Cases (London: Stevens & Sons Ltd., 1959), p. 803

<sup>20</sup>In the Franco-Prussian War of 1870-70, the dead on both sides were only 110,000. This is less than the potential victims of modern air attack. See J. Stone, Legal Controls, p. 339.





<sup>21</sup>Joseph L. Kunz, "The Chaotic Status of the Laws of War, and the Urgent Necessity for their Revision," A.J.I.L., XLV (1951), pp. 31-61

<sup>22</sup>Stone, Legal Controls, p. 341

<sup>23</sup>A.P. Higgins, The Hague Peace Conferences, op. cit., p. 259.

<sup>24</sup>Preamble to the Hague Conventions, 1899, 1907. Ibid.

<sup>25</sup>Fritz Grob, The Relativity of War and Peace (Yale: Yale University Press, 1949), pp. 1-7; and Green, "Armed Conflict, War, and Self Defence," p. 397

<sup>26</sup>L.C. Green, "Armed Conflict . . . .," p. 395.

<sup>27</sup>Also in The Hoop (1799), I C Rob 196-199, Lord Stowell said: "by the Law and Constitution of this Country, the Sovereign alone has the power of declaring war or peace," see also Green, International Law Through the Cases, p. 636

<sup>28</sup>"State of war," "state of peace," an "act of war," according to Grob are some of the terms generally regarded as belonging to the legal vocabulary. They are to be found in Court Proceedings, Parliamentary debates, diplomatic papers, speeches and other official statements made by statesmen, and in works of legal writers. Other terms are "de jure war," "de facto war," "belligerency," and "non-belligerency," Grob, The Relativity of War and Peace, pp. 3-4.

<sup>29</sup>Grotius, De Jure Belli ac Pacis, 1625, 1 c2, para. 2, vol. 2, Book 1. Translation by Francis W. Kelsey (New York: Oceana Publications, 1964).

<sup>30</sup>Leviathan, Part 1, Chapter 13.

<sup>31</sup>Stone, Legal Controls, p. 298.

<sup>32</sup>Ibid.

<sup>33</sup>Art. 16 of the League of Nations.

<sup>34</sup>See Reports and Resolutions on the Subject of Art. 16 of the Covenant by the Report by the Secretary-General, League of Nations, Document A.14, 1927, V, p. 17.

<sup>35</sup>Green, "Armed Conflict, War and Self Defence," p. 409.



<sup>36</sup>F.P. Walters, A History of the League of Nations, vol. 1 (1952), pp. 105-109; 398-400

<sup>37</sup>League of Nations, Official Journal, 9th Year, No. 1, January 1928, p. 148.

<sup>38</sup>Ibid., p. 149

<sup>39</sup>League of Nations, Official Journal, 9th Year, No. 1, January 1928, p. 154.

<sup>40</sup>Ibid., p. 177

<sup>41</sup>Railway Traffic between Lithuania and Poland (Railway Sector Landwarow-Kaisiadorys), P.C.I.J. Series c., No. 54 (1932), p. 188

<sup>42</sup>Ibid., p. 272

<sup>43</sup>Ibid., p. 281

<sup>44</sup>Article 2(5) of U.N. Charter.

<sup>45</sup>Article 43(1): "All members of the U.N., in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with special agreement or agreements armed forces, assistance, and facilities, including right of passage, necessary for the purpose of maintaining international peace and security."

<sup>46</sup>In the few isolated articles of the Charter in which the word "war" appears (Art. 53, para. 2; Art. 77, para. 1(b) and Art. 107) the references are to past wars and not to future wars.

<sup>47</sup>Preamble, para. 8 of the U.N. Charter.

<sup>48</sup>Article 2, para. 4.

<sup>49</sup>Andrew Boyd, United Nations: Piety, Myth and Truth, (Baltimore: Penguin, 1961), p. 161

<sup>50</sup>Ibid.

<sup>51</sup>Green, "Armed Conflict, War and Self Defence," p. 416



<sup>5 2</sup>In the Israel-Arab war there had been a situation similar to that between Poland and Lithuania under the League of Nations. In 1951, the Israeli representative to the U.N. said among other things: "Israel is in no state of war with Egypt, and also denies that Egypt has the least right to be at war with Israel." The Egyptian representative in another circumstance said: "We are exercising the right of war. We are still legally at war with Israel. An armistice does not put an end to a state of war. It does not prohibit a country from exercising certain rights of war." See Nathan Feinberg, The Legality of "a State of War" After the Cessation of Hostilities (Jerusalem: The Magnes Press, 1961) pp. 28-34

<sup>5 3</sup>M.O. Hudson, 3 International Legislation, 1931, p. 1671

<sup>5 4</sup>Ibid.

<sup>5 5</sup>For the use of the phrase "hot pursuit" see the article "International Law and Military Operations against Insurgents in Neutral Territory." Note from Columbia Law Review in The Vietnam War and International Law, ed. by R. Falk, pp. 572-593.



## Chapter II

### THE HISTORY AND AGENTS OF CBW

#### History of CBW

Long before the Geneva Protocol of 1925 combatants had used poisonous gases and biological agents in primitive warfares. About 2000 B.C., the wars of ancient India were fought "with smoke screens, incendiary devices and toxic fumes that caused slumber and yawning."<sup>1</sup> The Peloponnesian war, also saw the use of gas during the siege of Plataea in 429 B.C. The Spartans, the great fighters of their time, besieged Athens' satellite cities by burning poisonous clouds of sulphur into sulphur dioxide. Perhaps Julius Caesar, in his various campaigns, used chemical agents. History records that a highly combustible mixture of chemicals called "Greek fire" invented about A.D. 670 was used as an incendiary in land and sea warfares for centuries.<sup>2</sup> Smoke was also used by the forces of King Charles XII of Sweden in crossing the Dvina river in 1701.<sup>3</sup> The Jibaro Indians, unlike most primitive war-fighters, believed that poisonous arrows were not for wars but for hunting, and if man is killed with a poisoned arrow, that poison will no longer be effective in killing an animal or bird of the forest.<sup>4</sup> In 1456, an alchemist who prepared a poisonous mixture saved the Christians in Belgrade from the attacking Turks. The Christians dipped rags in the chemical and burned them, creating a toxic cloud before





the enemies. In 1763, Sir Jeffrey Amherst, the Commander of the British Forces in America, had two blankets and a handkerchief from a British Small Pox Hospital sent to the Indian Chiefs. An epidemic of small pox killed many Indians as a consequence.<sup>5</sup> In 1855, Lord Dundonald proposed that the British government use sulphur in the Crimean War to make the defeat of the Russians easy and certain. The British government, on realizing the horrifying effect of such a gas, declined to take Dundonald's advice.<sup>6</sup>

It is a well known fact that there was a widespread repudiation of the existing international agreement on the use of gas shell by both sides in the First World War. On April 22, 1915, the Germans first released a lethal cloud of chlorine gas on the French lines at Ypres, killing more than 5,000 soldiers and injuring another 10,000.<sup>7</sup> Most historians record that the 1915 German attack was the first use of chemicals in the war. In June, 1918, the United States first used gas against the Germans. On the whole, about 17,000 chemical troops were employed by the Allies and their enemies and 1.3 million casualties, including 91,000 deaths were attributed to gas warfare.<sup>8</sup> Curt Wachtel, in his study of the psychological aspects of chemical warfare,<sup>9</sup> has listed the percentages of those who died through gas in proportion to the total number of war casualties in the First World War as follows:



United States (only in hospital) . . .	1.73%
Great Britain . . . . .	3.35%
France . . . . .	4.20%
Germany (only in 1918) . . . . .	3.00%

Both sides made steady use of phosgene, chlorine and mustard in the war, while France suffered the greatest tragedy, when compared with other "powers."

The German gas attack on Ypres was regarded, especially by the Allied countries, as an atrocity and they protested against it. Again, in the 1930's, allegations were made that the Germans had tried to spread cholera in Italy during the First World War. This was confirmed in 1934 by a British journalist, Wickham Steed, who exposed what he believed to be German experiments to propagate the bacterium, Serratia Marcescens in the underground railways of London and Paris.<sup>10</sup> One may say that the Germans were not the only defaulters. The Allied countries retaliated without exhausting all other means of inducing the enemy to desist from the "illegal" practice. But this was an act of reprisal which is a lawful form of retaliation though it is difficult to assess its proportionate<sup>11</sup> character. When the Allied countries proceeded to develop their own gases and means of delivery, they made gas a standard part of the weapons system of the belligerents who possessed the capability to use it. After the end of the war, the victorious Allies continued to emphasize the "illegality" of the German Gas Warfare. It was not only the



Allied countries that condemned the German gas warfare; the Allied document - The Treaty of Versailles - signed on June 28, 1919 - which terminated the war, also had this to say about the German use of gas in the future:

The use of asphyxiating, poisonous, or other gases and of analogous liquids, materials, devices being prohibited, their manufacture and importation are strictly forbidden to Germany.<sup>12</sup>

Article 172 further declared "that within a period of three months from the coming into force of the present treaty, the German government would disclose to the government of the Allied and Associated powers the nature and mode of the manufacture of explosives, toxic substances, or other like chemical preparations used by them in war or prepared by them for the purpose of being so used."

After the Geneva Protocol of 1925 and before the Second World War, Italy used mustard gas against Ethiopians in the Abyssinian campaign of 1936.<sup>13</sup>

When America participated in the Second World War, the State Department, according to George Burns,<sup>14</sup> became concerned that the Japanese were not a party to the Protocol. He also indicated that the British, French, Italian and German governments had exchanged pledges to observe the Protocol.

The United States, a major non-adherent to the Protocol did not use any gas in either the Second World War or the





Korean War of 1953. In the Second World War, no CBW agents were employed. The Geneva Protocol<sup>15</sup> may have had some impact on the custom of warfare of the belligerent powers in the war. Another reason could be that (unlike the situation in the First World War when Germans first used mustard gas, or when United States used nuclear bombs against the Japanese in the Second World War) both sides in the Second World War had sufficient stockpiles of CBW agents, and each power was deterred by the reprisal effects of these weapons of CBW. When German troops considered the use of chemical weapons, an appeal to Germany which contained a warning of the criminal nature of such action was signed by the U.S.S.R., Britain and United States.<sup>16</sup> During the World War II, the Germans had developed Zyklon B, a lethal gas used in killing Jewish concentration camp prisoners.<sup>17</sup> On July 9, 1943, there was a rumour that there was the likelihood of the use of gas in the war. Referring to this possibility the President of the United States, Franklin D. Roosevelt said: "I am revolted at the idea that some country, even the present foes, could, if they had the intention, apply such horrible and inhuman weapons against mankind. I have no doubt that the application of this weapon would be recognized as unlawful by the public opinion of the civilized world."<sup>18</sup> Churchill warned Hitler of the reprisal effect of any German use of gas against Great Britain and allies in strong terms:



. . . if it were used against ourselves and allies, if we are satisfied that this new outrage has been committed by Hitler, we will use our great and growing air superiority in the West to carry gas warfare on the largest possible scale far and wide against objectives in Germany.<sup>19</sup>

The Soviet Union, a likely German target, had also warned Hitler against use of CB agents in the war, and had also professed its capability and readiness to retaliate in kind.<sup>20</sup> Churchill's and British opposition<sup>21</sup> to the use of gas in war, was based upon their fear that this would be the signal for the Germans to use it against England. Thus the fear of retaliation and not deference to Roosevelt's 1942 pledge or the 1925 Protocol was the dissuading factor in Great Britain. It was equally the fear of any retaliation from the United States, Great Britain, the Soviet Union and their allies that restrained Hitler from use of CB agents despite the German tremendous air superiority.<sup>22</sup> Microbiologists, who crossed over from Western Germany to the German Democratic Republic, reported that Western Germany was still researching in bacteriological and chemical weapons at the Aerobiological Institute.<sup>23</sup> Dr. Theodore Rosebury, who worked in the major American Center for Research at Fort Deterick, said that under the pressure of the Second World War, the involvement in CBW research intensified. He has since resigned and has been critical of the United States research program. By the end of the Second World War, 5,000 people were employed at Fort Deterick. In addition to Fort Deterick, America has many other



centers for various CBW programs.<sup>24</sup>

Britain has a research center at Porton, by far smaller than America's Fort Deterick, and had carried out notable activities during the Second World War on Gruinard Island off the northwest coast of mainland Scotland. Here experiments involved spraying the Island with anthrax bacteria - apparently testing the feasibility of biological warfare - killing many sheep.<sup>25</sup>

The Japanese effort was revealed in the 1949 trial of a dozen Japanese prisoners by the Soviet government, at Khabarovsk. They revealed that the Japanese CBW Program started in 1931 and that two installations were built in 1936, one in Manchuria and the other in Japan. The installation in Manchuria near Harbin was disguised as a Red Cross Unit, and was hurriedly destroyed in 1945 prior to the Russian occupation of that area. The prisoners described the different ways that the Japanese soldiers were taught to deliver the agents of CBW<sup>26</sup> to the enemies. The diseases investigated included plague, cholera, typhoid, paratyphoid and anthrax. Chinese and Soviet prisoners were said to have been used in the Japanese experiments.

In 1949, the Soviet Union accused the Americans of using Canadian Eskimos in the experimental testing of a biological weapon. Earlier, in 1947, an American commentator





blamed the Soviet Union for the Egyptian cholera outbreak which the American government helped to combat with cholera vaccine.<sup>27</sup>

In 1952, the Chinese Peace Committee and the Academia Sinicia called in an International Scientific Commission interested in Chinese affairs to investigate allegations by the Chinese and the North Koreans that the United States had engaged in bacteriological warfare in North Korea and China.

By the end of March, 1969, the United States had sprayed herbicides and defoliants over an area of 7,271 square miles of South Vietnam. This is more than ten per cent of the whole of South Vietnam. Whether by accident or otherwise, the U.S. troops had also sprayed 37,000 acres of Cambodian territory near the Vietnam frontier by April, 1969.<sup>28</sup> The American activities in Asia have attracted criticism in view of the human and economic loss that the employment of chemicals in warfare normally cause. The United States government, on the other hand, has enumerated some military advantages which the use of defoliants render to the United States soldiers<sup>29</sup> fighting in that area. Evidence shows that the United States government, for many years in the past, has increased her budget allocation to the CBW programs. In 1961, the total research and development program on CBW cost the United States government \$57 million; it provided the army with an additional \$46 million for the procurement of actual





weapons. By 1964, the research and development program was costing more than \$158 million, and all three services had allocations for procurement: the Army, \$117 million; the Navy, \$11 million; and the Air Force, \$8.7 million.<sup>30</sup> According to the Dorothy Crowfoot Hodgkin's report in the London Times, the US current plans for defoliation include a budget of \$8 million for the current fiscal year (1970-71), orders of 700,000 gallons of "blue" and 600,000 gallons of "white," with 15,000 metric tons of food crops scheduled for destruction this year.<sup>31</sup>

The Soviet Union<sup>32</sup> has researched aspects of Biological warfare since 1924, and in 1951 set up biological bases on the Caspian Sea.<sup>33</sup> Other bases were located on the Black Sea, about 250 miles from the Turkish border, one about 120 miles north of the Iranian border, and one in the Korean War theatre. The Russians had also established a germ warfare substation in Pyongyang, the capital of North Korea, by 1947.<sup>34</sup>

Canada's major research center is a 1,000 square mile stretch of prairie land in Suffield, 150 miles south of Calgary. This complex is called the Defence Research Establishment.<sup>35</sup> There exists an understanding between Canada, the United States and Great Britain for mutual development of chemical and biological agents<sup>36</sup> including a joint sharing of research information. Thus, for example, some of the defoliants and



chemical agents used by the United States in Asia have either been developed or tested in Suffield, Canada. It is possible that CS, an irritant gas, may be developed in Britain, manufactured in the United States and tested in Canada. In his article, "Germ and Gas Warfare - What Canada is doing about it," James Taylor, after his visit to Suffield, said that this center has 360 employees mostly scientists and technicians and an annual payroll of around \$2.8 million.<sup>37</sup> Suffield, according to Taylor, concentrates on four areas of defence against gas and warfare: "physical protection, remedy by decontamination, detection and field testing by troops<sup>38</sup> to develop systems and procedures."<sup>39</sup>

### The Weapons of CBW

The study of the technical aspects of CBW demands a separate inquiry into the characteristics of Chemical Warfare, Biological Warfare and their respective agents.

The latter, Biological Warfare, is described by the United States Department of Army as:

The military use of living organisms, or toxic products to cause death, disability or damage to man, his domestic animals, or crops. It includes the employment not only of bacteria, but also of other micro-organisms, and higher forms of life such as insects and other pests.<sup>40</sup>

The toxic germs are selected on the basis of their effective use in warfare. The effectiveness of these biologi-



cal weapons will depend on their ability to multiply in the man, animal, or plant which they attack. Because of this, only organisms that are highly infectious and virulent are selected and grown in sufficient quantity and purity in the laboratory. In addition, the selected organism should be highly stable so that if it is dispersed in an aerosol spray from an aircraft, bomb, or rocket it will remain active for a considerable period of time to establish itself on the host. It is also expected to be effective regardless of medical counter-measures, in order to cause a large number of casualties. The organism establishes itself on the human body by manufacturing and releasing complex substances known as "toxins." These toxins are of various types, based on the degree of toxicity and incapacitating effects.<sup>41</sup> Only a few naturally occurring diseases like plague<sup>42</sup> known to mankind can kill 90 per cent or more of those they infect.

Some bacteria have as devastating effects on plants as they do on animals. Between 1845 and 1947, there was an attack on potato plants caused by *Phytophthora infestans*. In Ireland, the failure of the potato crop in two successive years brought about a famine in which approximately one million died and another 1.5 million Irishmen emigrated overseas. In the Phillipines, a disastrous Plague which began in 1917 and lasted for nearly ten years killed almost all the cattle and left the country in a poor economic situation.<sup>43</sup>





Perhaps the very idea of applying pathogenic micro-organisms as instruments of war springs from the historic experience of various epidemics recorded by history. A partial listing of other dangerous micro-organisms includes blastomycosis, a fungus found in North and South America; and Rocky Mountain spotted fever, a rickettsia usually transmitted through insect or tick bites.<sup>44</sup> The delivery of biological agents during combat is done in two main ways: first, through "overt military delivery" - through weapons systems; second, through "convert methods" - through insects<sup>45</sup> and anthropod vectors like birds and animals. Evidence reveals that researchers at Fort Deterick, at one time or another, suffered from such dangerous diseases as tularemia, brucellosis, Q-fever, anthrax, viral equine encephalitis,<sup>46</sup> an indication that the above names germ agents were being worked on at the center.

Another British CB center is at Nancekuke.<sup>47</sup> This occupies 800 acres of a disused airfield on the cliff tops overlooking Portneath Bay. The station produces CS gas and antidotes to nerve agents, as well as its other work of investigating substances that could be used in lethal chemical weapons.<sup>48</sup> Nancekuke employs 175 people and costs about \$858,000 a year to maintain.<sup>49</sup>

Venezuelan equine encephalomyelitis (VEE) is one of the infectious diseases which mainly affect birds and animals and are possibly transmissible to man. Another is Eastern



equine encephalomyelitis (EEE). Brucellosis or "undulant fever" is a general infection of herbivorous animals, also transmissible to man. Human beings would be expected to be attacked by the transmissible diseases if they were affected by the attacking aerosol cloud, and occasional individuals might contact the disease from infected animals through direct contact. Though biological agents were not used in the world wars, their manufacture in large quantities was aimed at possible use in self-defence or in case of military necessity. According to the U.S. Army Training Manual 3-216, "even though there are unknowns regarding the tactical and strategic value of biological agents, their potential should not be underestimated."

Chemical agents of warfare are differently defined as:

. . . chemical substances, whether gases, liquids or solid, which are employed because of their direct toxic effects on man, animals and plants.<sup>50</sup>

These chemical agents vary from lethal nerve agents to incapacitating agents known as BX and the riot control gases - CS, CN, and DM. The United States uses these riot control gases in Vietnam,<sup>51</sup> while Great Britain uses CS in Ireland.<sup>52</sup> DM and HD are harassing agents, and were used in the First World War. It was HD that caused one-fourth of the United States gas casualties in World War I.<sup>53</sup> Another group of chemicals are nerve gases. CB or Sarin which is a volatile gas that can kill in minutes in dosages of a drop. VX is effective for a



long period of time. It was a similar nerve gas that the Nazis used in killing Jewish concentration camp prisoners,<sup>54</sup> and in government attacks on villages of Hadda and Kitaf in Yemen by Egyptians.<sup>55</sup> The United States uses three major herbicides in Vietnam - simply called "orange," "white" and "blue." The "orange" is described in the U.S. Army Training Circular (T.C. 3-16, April 9, 1969) as "relatively non-toxic to man and animals." "Orange" which is a mixture of 2,4-D and 2, 4,5-T, is used against heavy jungle.<sup>56</sup> A mangrove forest sprayed "orange" nine years ago still shows no signs of recovery.<sup>57</sup> This agent is also harmful to man. "White" is a mixture of 80 per cent 2,4-D and 20 per cent Picloram used near populated areas because of its low volatility and unlikeliness to drift off target. Areas in Puerto Rico sprayed with the chemical agent "white" remained essentially bare of leaves for over two years.<sup>58</sup> Though the effective dose range of defoliants varies according to the particular species of plant attacked, its age, the meteorological conditions and the desired effect - e.g., plant death or defoliation, the duration effects last usually weeks or months. Some chemicals kill indiscriminately; others selectively.<sup>59</sup>

Evidence<sup>60</sup> shows that in some cases these herbicides have clinical effects on civilians, and temporary or permanent damage on the soil and plants. The ecological and genetic effects of the defoliants used in Vietnam will continue for a





long time after their use ceases according to the American scientific team report to the American Association for the Advancement of Science (A.A.A.S.).<sup>61</sup>

Vietnamese who were in the spraying areas for periods between two months to five years, suffered from different diseases ranging from headaches, asthenia to paralysis. Observations on 179 of these Vietnamese disclosed that some had prolonged illness and chromosomal aberrations. In half of the births that occurred in their sample, some birth anomaly was observed. There was likelihood of genetic damage.<sup>62</sup>

According to the United Nations report on Chemical and Biological Weapons, a given town with a population of 80,000 people attacked by nerve gas could cause 40,000 casualties - half of them fatal - if the attack is a surprise attack. If not, the casualties could be reduced to 2,000 casualties.<sup>63</sup> Incapacitating chemical agents, like tear gases and certain psychochemicals,<sup>64</sup> produce in normal healthy people a temporary, reversible disability with few, if any, permanent effects. Although chemical and biological agents are designated, especially in warfare, as either lethal agents - agents intended to kill - or as incapacitating agents - agents that are intended to cause disability<sup>65</sup> - this does not mean that these terms are absolute; rather they imply statistical probabilities of response, which might be more uncertain with bacteriological than with chemical agents.





The effectiveness of any employed agent, chemical or biological, in warfare, depends on two main factors: namely, the particular agent - gas or micro-organism - and the host - man, animal or plant. There are obvious differences in important aspects of the agents in relation to their "potential toxicity, speed of action, duration of effect, specificity, controllability, and residual effects."<sup>66</sup> Again, not every host attacked with these agents will die; whereas infants and people weakened by malnutrition or old age might succumb to an attack, strong, healthy and immunized people might resist an attack for a reasonable time.

The U.N. report on Chemical and Biological Weapons, and the effect of their possible use may prove useful in persuading non-parties to the Protocol to ratify it. Such a report will be most relevant if it is done yearly, to incorporate latest findings on the effects of the possible use of CB weapons. The findings of such bodies as A.A.A.S., W.H.O., and I.C.R.C. may be valuable to the International Community. A report made by a group of consultants under W.H.O., entitled "Health Aspects of Chemical and Biological Weapons" concluded inter alia that:

The possible effects of chemical and biological weapons are subject to a high degree of uncertainty and unpredictability. owing to the involvement of complex and extremely variable meteorological, physiological, epidemiological, ecological, and other factors.<sup>67</sup>



This W.H.O. report reinforces the need for co-operation in the field of research in order to predict with certainty the complex and extremely variable effects of chemical and biological weapons. When this happens, governments and the public may be better informed on the issue.

In the light of the study of the nature and the use of CB weapons, it is necessary to examine the legal restraints that nations have on CBW.



Table I  
Some Chemical Agents<sup>1</sup>

US Army Code	Trivial Name	Smell	Dissem- inated Form	Symptoms	Remarks
CG	phosgene	new-mown hay; imparts metallic taste to tobacco	gas	<u>lethal</u> : coughing, <u>retching</u> , frothing at mouth, cyanosis, asphyxia, pneumonia	produced 80% of WW1 gas fatalities; extensively stock- piled in WW2
AC	prussic acid	bitter almonds	vapor	<u>lethal</u> : giddiness, convulsions, uncon- sciousness, asphyxia	stockpiled by USA from 1942 on
HD	distilled mustard	faint garlic	vapor liquid	<u>harassing</u> : eyes - <u>inflammation</u> , photo- phobia, ulceration, blindness	most widely stock- piled agent of WW2, used in WW1
T		none	liquid aerosol	<u>skin</u> : redness, irritation, blisters	used mixed with mustard, production methods yield such mixtures, British stockpiled 60/40 HT during WW2
Q	sesqui- mustard	none	aerosol	<u>lethal</u> : resembles CG in its action on lungs, other systemic effects	
HN <sub>3</sub>	nitrogen mustard	faint geranium smell	vapor liquid aerosol		less smell than HD, so even more insidious





US Army Code	Trivial Name	Smell	Dissem- inated Form	Symptoms	Remarks
GA	tabun	none	vapor liquid aerosol	<u>harassing</u> : eye pupils constrict, vision blurs and dims, eyeballs hurt	standard German tabun contained 20% chloro- benzine
GB	sarin	almost none	vapor liquid	<u>respiration</u> : chest tightness, difficult to breathe	Germans stockpiled large quantities of its intermediates but could make only 1/2 ton
GD	soman	slightly fruity yo camphor-like	vapor liquid aerosol		highly resistant to oxime therapy
GE			vapor liquid aerosol	<u>lethal</u> : drooling, sweating, nausea, vomiting, cramps, involuntary defeca- tion or urination, twitching, jerking, staggering, headache, confusion, drowsiness, coma, convulsions, asphyxia	harder to treat than GB
GF	CMPF		vapor liquid aerosol		
VE			liquid aerosol		
VX			liquid aerosol		



US Army Code	Trivial Name	Smell	Dissem- inated Form	Symptoms	Remarks
CA	BBC Camite	soured fruit	vapor aerosol	harassing: burning <u>feeling in mucous</u> membranes, severe eye irritation and lachrymation, head- ache	useful as a persistent harassing agent
CN	CAP	apple blossom	aerosol	harassing: burning <u>feeling on moist</u> skin, copious lachrymation	
DM	adamsite	almost none	aerosol	harassing: headache, <u>sneezing, coughing,</u> chest pain, nausea, vomiting	
CS	OCMB	peppery	aerosol	harassing: stinging <u>and burning feeling</u> on skin, coughing, tears, chest pain and tightness, nausea	
BZ			aerosol	slowing of physical and mental activity, giddiness, disorient- ation, hallucinations occasional maniacal behaviour	only standardized incapacitating agent by 1963



Table II  
Some Biological Agents<sup>1</sup>

Disease	Organism	Effects	Epidemicity	Remarks
<u>BACTERIAL DISEASES</u>				
anthrax	Bacillus anthracis	respiratory form normally fatal if untreated	low	one of the most stable agents
brucellosis	Brucella melitensis	long-lasting, recurrent severe fever, rarely fatal	low	affects both man and domestic animals
cholera	Vibrio cholerae	severe intestinal infection, sometimes fatal	high	unlikely to be effective through water systems
glanders	Malleomyces mallei	in acute form, severe fever often fatal	low	affects both man and domestic animals
meliodosis	Whitmorella pseudomallei	normally fatal fever, producing mania and delirium	low	very rare and little known disease
plague	Pasteurella pestis	very severe, often fatal	high	only pneumatic (respiratory) plague likely to be of BW use



Disease	Organism	Effects	Epidemicity	Remarks
tularemia	Pasteurella tularensis	severe fever, 5-8% fatal	none	good BW agent, apart from doubts concerning stability
<div>VIRAL DISEASES</div>				
breakbone fever	dengue viruses	most incapacitating fever known, very rarely fatal	low	might be useful as an incapacitating agent
psittacosis		mild to severe pneumonia, sometimes fatal	high	birds act as reservoir of disease
smallpox	Poxvirus variolae	severe, often fatal	high	generally, immunity too widespread, but see text for possible use in USA and Europe
yellow fever		jaundice-type fever, 30% mortality	none	naturally a subtropical disease, a strain which could survive in temperate climate might be dangerous
<div>RICKETTSIAL DISEASES</div>				
Q-fever	Coxiella burnetii	fever for one week, 1% mortality	none	very high infectivity





Disease	Organism	Effects	Epidemicity	Remarks
epidemic typhus	Rickettsia prowazeki	severe, often fatal	high, but cannot spread man-to-man	unlikely BW agent, poor stability
<u>FUNGAL DISEASE</u>				
coccidioidomycosis	Coccidioides immitis	mild to severe fever, rarely fatal	low	highly stable, unsuitable agent if a vaccine were produced
<u>TOXIN</u>				
botulism	Clostridium botulinum	severe poisoning, 60-70% mortality	none	acts more quickly than any other BW agent, troops could invade after 24 hours

<sup>1</sup>Robin Clarke, The Silent Weapons - The Realities of Chemical and Biological Warfare, New York, 1968



## Footnotes to Chapter II

<sup>1</sup> Seymour M. Hersh, Chemical and Biological Warfare: America's Hidden Arsenal (New York: The Bobbs-Merrill Co., 1968), p. 3

<sup>2</sup> Britannica Encyclopaedia, V. 382

<sup>3</sup> Ibid.

<sup>4</sup> Rafael Karsten, "Blood Revenge and War Among the Jibaro Indians of Eastern Ecuador," Law and Warfare, ed. by Paul Bohannon (New York: The Natural History Press, 1967), pp. 307-308

<sup>5</sup> Hersh, Chemical and Biological Warfare, p. 4

<sup>6</sup> Robin Clarke, The Silent Weapons (New York: David McKay Co., 1968), p. 15

<sup>7</sup> Hersh, Chemical and Biological Warfare, p. 5

<sup>8</sup> Ibid., p. 6

<sup>9</sup> Thomas A.C. Rennie, and Saul M. Small, 4 Psychological Aspects of Chemical Warfare, N. 1, Josiah Macy Jr. Foundation (1943), p. 14

<sup>10</sup> Clarke, The Silent Weapons, p. 18

<sup>11</sup> Oppenheim had said that "the indiscriminant use of poison gas by way of reprisals is considered criminal unless resorted to as a measure of retaliation in kind." See Oppenheim's International Law, ed. by H. Lauterpacht, II (1952), p. 344

<sup>12</sup> M.O. Hudson, 2 International Legislation

<sup>13</sup> Hersh, op. cit., p. 7

<sup>14</sup> Former General Counsel, U.S. Arms Control, and Disarmament Agency, and Alternate Representative, Geneva Disarmament Conference.

<sup>15</sup> See Chemical and Bacteriological (Biological) Weapons and the Effects of their Possible Use: United Nations Documents, Dept. of Political and Security Council Affairs, 1969, p. 9 See also the next Chapter



<sup>16</sup>See G. Bunn, "Banning Poison and Germ Warfare: Should the United States Agree?" W.L.R., N. 2, 1969, pp. 381-382

<sup>17</sup>Hersh, Chemical and Biological Warfare, p. 8

<sup>18</sup>Oganes Baroyan, "The Potential Warfare Application of Pathogenics, The Supreme Folly, ed. by the Women's International League for Peace and Freedom, British Branch, 1969, p. 9

<sup>19</sup>New York Times, May 11, 1943

<sup>20</sup>Hersh, Chemical and Biological Warfare, p. 10

<sup>21</sup>Ibid., p. 26 (notes)

<sup>22</sup>Thomas, A.V., and Thomas, A.J., Jr., Legal Limits on the Use of Chemical and Biological Weapons (Dallas: Southern Methodist University Press, 1970), p. 147

<sup>23</sup>Neues Deutschland, February 28, 1968 and Suddeutches Zeitung, February 27, 1968

<sup>24</sup>Richard D. McCarthy has named several U.S. centers for CB programmes, which are summarized as follows:

Under U.S. Federal CBW Centers

- 3 Research and Development Centers in Edgewood Arsenal; Fort Deterick, Federick; and Pine Bluff Arsenal, Pine Bluff.
- 6 Test Sites and Centers in Desert Test Center; Fort Douglas; Dugway Province, Ground Dugway; Fort Huachuca, Arizona; Fort Clayton, Panama Canal Zone; Fort Greeley, Alaska; and Camp Century, Greenland.
- 7 Production Facilities at Muscle Shoals Army Chemical Plant, Alabama; Newport Army Ammunition Plant, Newport, Indiana; Rocky Mountain Arsenal, Denver, Colorado; Biological Production Plant, Fort Deterick; Chemical Production Plant, Edgewood Arsenal, Edgewood, Maryland; and Chemical and Biological Plant, Pine Bluff Arsenal, Arkansas.
- 1 CBW School at Fort McClelland, Alabama.
- 5 Munition Depots and Shipping Centers at Anniston Army Depot, Alabama; Blue Grass Army Ammunition Depot, Lexington, Kentucky; Sunny Point Military Ocean Terminal, Wilmington, North Carolina; Tooele Army Ammunition Depot, Tooele, Utah; and Umatilla Army Ammunition Depot, Umatilla, Oregon





Under U.S. Navy

- 2 Research and Development Centers at Naval Applied Science Lab., Brooklyn, N.Y.; and Naval Biological Lab., Oakland, California
- 5 Munitions Depots and Shipping Centers at Naval Ammunition Depot, Bangor; Ammunition Depot Crane, Indiana; Naval Ammunition Depot, Earle, N.J.; Naval Weapons Stations, Charleston, S.C.; and Naval Weapons Stations, California.

Under U.S. Dept. of Agriculture

- 1 Animal disease and Parasite Research Lab., Plum Island, Connecticut

In addition to the above, there are 22 universities in the U.S. conducting one form or another of CBW research, and 27 companies conducting CBW Research or Anti-Food Warfare Research. See McCarthy, CBW, The Ultimate Folly, pp. 36-40

<sup>2 5</sup>Clarke, The Silent Weapons, p. 20

<sup>2 6</sup>One concerned the dropping of bombs from aircraft; the other, spraying of bacteria from aircraft; and the third means, contaminating water sources and land by sabotage. Ibid., p. 21

<sup>2 7</sup>Clarke, The Silent Weapons, p. 21

<sup>2 8</sup>McCarthy, CBW, The Ultimate Folly, pp. 74-84

<sup>2 9</sup>See the Chapter on Military Necessity and Humanity, p.

<sup>3 0</sup>See Clarke, The Silent Weapons, p. 32

<sup>3 1</sup>The London Times, December 28, 1970, p. 6

<sup>3 2</sup>The Soviet Union, unlike the U.S. does not allow any information about its CBW activities.

<sup>3 3</sup>Hersh, Chemical and Biological Warfare, p. 289

<sup>3 4</sup>The story of the Soviet involvement was told by Retired Navy Admiral, Ellis M. Zacharias. He collected some information from emigrants and an unnamed Bulgarian botanist who escaped from the mainland Russian Biological Warfare Center, where hundreds of scientists, and thousands of military working on compounds with up-to-date facilities are employed. See Hersh, Chemical and Biological Warfare, p. 288

<sup>3 5</sup>Toronto Daily Star, December 20, 1969



<sup>36</sup>Canadian Dimension, V. no. 7, Dec. - Jan. 1968-69

<sup>37</sup>James Taylor, "Germ and Gas Warfare: What Canada is doing about it," United Church OBSERVER, April 15, 1970, p.13

<sup>38</sup>According to Taylor most scientists at Suffield have volunteered as guinea pigs at one time or another. Ibid., p. 14

<sup>39</sup>Canadian unconditional commitment excludes tear gas and riot control agents. See Globe and Mail, March 25, 1970.

<sup>40</sup>U.S. Department of the Army, Military, Biological Warfare Agents 2, 3-216 (1956).

<sup>41</sup>Clarke, The Silent Weapons, p. 89

<sup>42</sup>See Table 2, and Hersh, Chemical and Biological Warfare, p. xiii

<sup>43</sup>Ibid.

<sup>44</sup>Hersh, Chemical and Biological Warfare, p. 84

<sup>45</sup>In 1959, U.S. Fort Deterick insect inventory included "mosquitos infected with yellow fever, malaria and dengue; flies infected with plague; ticks with tularemia, relapsing fever and Colorado fever; house flies with cholera, anthrax and dysentery. Other facilities at Fort Deterick included laboratories for mass breeding of pathogenic micro-organisms and green houses for investigating crop pathogens and various chemicals that harm or destroy plants." Ibid., p. 86

<sup>46</sup>Ibid., p. 89

<sup>47</sup>The London Times, October 30, 1970, p. 1

<sup>48</sup>Ibid.

<sup>49</sup>Ibid.

<sup>50</sup>U.N. Document on Chemical and Biological Weapons, p. 5

<sup>51</sup>Hersh, Chemical and Biological Warfare, p. 43

<sup>52</sup>The London Times, September 28, 1970, pp. 1-2

<sup>53</sup>Hersh, Chemical and Biological Warfare, p. xii



<sup>54</sup>The London Times, September 28, 1970, pp. 1 and 2

<sup>55</sup>Hersh, Chemical and Biological Warfare, p. 284  
Also in the trial of Franz Stangl, former Commandant of the Treblinka death camp, who was sentenced to life imprisonment for his part in the murder of 40,000 Jews. Dr. Heinz Meven, the President of the Susseldorf court, said that 1.7 million Jews were killed between 1942 and 1943 in three polish extermination camps of Treblinka, Sobibor, and Belzec in various ways including the use of gas. See The London Times, December 23, 1970. p. 4

<sup>56</sup>The London Times, December 28, 1970, p. 6

<sup>57</sup>Ibid.

<sup>58</sup>Ibid.

<sup>59</sup>A mixture of n butyl esters of 2-4-D and 2, 4, 5-T. Ibid., pp. xi-xiii and McCarthy, CBW, The Ultimate Folly, p. 76

<sup>60</sup>These were reports to A.A.A.S. made by the North Vietnamese scientists and American scientists at a meeting in Paris in December, 1970. See D. Hodgkins account in The London Times, December, 1970, p. 6

<sup>61</sup>Ibid.

<sup>62</sup>Ibid.

<sup>63</sup>See U.N. Document, p. 37

<sup>64</sup>Ibid., p. 34

<sup>65</sup>U.S. Army Field Manual 3-10 issued March, 1966, Employment of Chemical and Biological Agents gives the objectives of CB operations as follows: "The employment of chemical agents to influence combat operations by producing casualties (death or incapacitating) or the threat of casualties among enemy troops." See Department of the Army, the Navy and the Air Force, March, 1966. See also, Hersh, Chemical and Biological Warfare, p. 48

<sup>66</sup>U.N. Document . . . , p. 6

<sup>67</sup>Health Aspects of Chemical and Biological Weapons, Geneva, 1970. See also Red Cross and Biological and Chemical Weapons, Geneva, 1970, p. 15





## Chapter III

### THE LEGAL STATUS OF CBW

In the analysis of the legal status of CBW, it is essential to examine certain ratified treaties and draft conventions that did not go into effect for lack of necessary ratifications; namely, the St. Petersburg Declaration of 1868, the Hague Convention of 1899 and 1907, the Treaty of Versailles of 1918, the Washington Treaty on Submarines and Gas Warfare of 1922, the Convention on the Limitation of Armaments of Central American States of 1923, and the Geneva Protocol of 1925. The customary international law banning CB agents and the applicability of the Geneva Protocol of 1925 to the use of "tear gas" and herbicides are also discussed.

#### Before the Geneva Protocol of 1925

The St. Petersburg Declaration of 1868 was the starting point in the evolution of the international conventions on the use of gas and germs in warfare. This declaration culminated in the Hague conventions of 1899 and 1907. The relevant part of the St. Petersburg Declaration read:

That the only legitimate object that states should endeavour to accomplish during war is to weaken the military force of the enemy;  
That for this purpose, it is sufficient to disable the greatest number of men;  
That this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;





That the employment of such arms would,  
therefore, be contrary to laws of humanity.<sup>1</sup>

This Declaration did not require any ratification, and was binding therefore on signature.<sup>2</sup> It outlawed a number of archaic and military outmoded devices. There are two important principles, relating to the regulation of the means of warfare: (a) a prohibition against the infliction of superfluous suffering, (b) a prohibition against the employment of arms that make death inevitable, e.g., gunshots. The former principle is the broader, and could be taken to include the latter. As regards CBW, the second prohibition against weapons rendering death inevitable is, in most cases, applicable to lethal poisons and poisoned weapons. It could also be applied to massive use of chemical and biological agents, which would condemn to death all persons regardless of their relationship to war.

In addition, some legal writers have accorded more attention to the Declaration's first prohibition dealing with the concept of "superfluous suffering," than its relations to poison and poisoned weapons. In expressing this relationship, some simply include the prohibition against poison and poisoned weapons in the general category of "superfluous suffering."<sup>3</sup> Others cite the general principle prohibiting superfluous suffering and list poison and poisoned weapons as the first example of a specific rule derived from the principle.<sup>4</sup> Spaight holds that the prohibition against superfluous suffer-



ing "means to-day, in practice, that explosives and expanding small arms<sup>5</sup> munition are banned. Attempts to enlarge the scope of the rule have been made without success."<sup>6</sup> Perhaps a more acceptable view is that offered in the United States Army Manual on the Law of Land Warfare: "What weapons cause 'unnecessary injury' can only be determined in the light of the practice of states in refraining from the use of a given weapon because it is believed to have that effect."<sup>7</sup> The United States interpretation equally requires some caution, for it seems unwarranted to condemn CBW agents on the grounds that they cause "superfluous suffering." "Superfluous suffering" requires a definite interpretation to be able to determine the extent of prohibition. "Superfluous suffering" caused by any weapon could only be determined by the degree of suffering that the use of alternative weapons will render to their victims, and the extent to which the "suffering" caused by such weapons is proportionate to its military effect. The prohibition against superfluous suffering as set out in the St. Petersburg Declaration is legally binding only in so far as it is a part of the principle of proportionality - a principle that should be applied to different types of CBW agents, in the context of their normal or anticipated employment. The status of the Declaration of St. Petersburg as an independent norm is very questionable; as Stone says, "it has little relevance to modern warfare."<sup>8</sup> In the words of Schwarzenberger, "the outlawry of projectiles below 400



grammes which are explosives or charged with fulminating or inflammable substances is all that this Declaration contains."<sup>9</sup>

A significant declaration was the Hague Gas Declaration of 1899,<sup>10</sup> which stated that signatories, "inspired by the sentiments expression in the Declaration of St. Petersburg," agree "to abstain from the use of projectiles, the sole object of which is the diffusion of asphyxiating or deleterious gases."<sup>11</sup> A significant limitation upon the permissible means of CBW was formulated in Article 23(a) of the Hague Rules of Land Warfare of 1907, which provided inter alia, that it is prohibited "to employ poison and poisoned weapons," and in 23(e) "to employ arms, projectiles, or material of a nature to cause superfluous injury."<sup>12</sup> No attempt was made by the drafters to define or clarify these two Articles.

In the first major poison gas attack at Ypres in 1915, the chlorine gas used by the German side was delivered in large cylinders which, it was argued, were not "projectiles" within the meaning of the Declaration of 1899.<sup>13</sup> The French on the other hand used projectiles containing tear gas which they claimed was not an "asphyxiating or deleterious" gas within the meaning of the Declaration.<sup>14</sup> In a like manner, a "projectile" used by Germany did not have "as its sole object the diffusion of poison gas because it was also used for shrapnel."<sup>15</sup>





Article 23(a) does not give full meaning to the word "poison." This is likely to include nuclear weapons<sup>16</sup> and all other weapons of warfare that are poisonous if it were to be applied today. In addition, it is not clear whether Article 23(a) embraces the poisoning of food and water supplies and prohibits them as means of warfare, though the preferred construction would result in such a prohibition.

The answer to the problem of literal application of the Hague Convention (1899 and 1907) is found in the Martens Clause which states that:

Until a more complete code of the laws of war can be drawn up the high contracting parties deem it expedient to declare that in cases not covered by rules adopted by them, the inhabitants and the belligerents remain under the protection and governance of the law of nations, derived from the usage established among civilized peoples from the laws of humanity and from the dictates of the public conscience.<sup>17</sup>

The contracting parties realized that it was not possible at the time to cover all the circumstances which could arise in practice; hence, they decided to include the above provisions in the Preambles to the Hague Conventions of 1899 and 1907. A de Martens clause also appears in each of the 1949 Geneva Conventions.

In regard to Article 23(e), the words "arms and material" would cover any weapon of war which was calculated to cause unnecessary suffering, though the British and



American military manuals do not seem to agree with this.<sup>18</sup> The use of "flame throwers" by the Germans in 1915 was regarded as unlawful because it involved the throwing of burning liquid on enemy combatants, and this was calculated to cause unnecessary suffering.<sup>19</sup> Do napalm, incendiary and jelly bombs not cause unnecessary suffering, even though they are not banned by the 1899 and 1907 Conventions" Writing about what agonizing pain such antipersonnel weapons can cause the victims, Greenspan comments:

To burn a man to death or disable him by burning must in all circumstances cause the victim agonizing pain and suffering. Burning can never offer an instantaneous and comparatively painless death such as may be afforded by a bullet or shell fragment. It is true that the latter too may inflict wounds which result in a horrible and lingering death. But such a consequence is not inevitable, while it is inevitable when fatal wounds are inflicted by burning.<sup>20</sup>

The U.S. Army Field Manual 27-10 has permitted the use of weapons which employ fire, such as tracer ammunition, flame throwers and other incendiary agents against targets. They should not, however, be employed in such a way as to cause "unnecessary suffering to individuals."

It appears that Article 23(e) aims at measuring the illegality of weapons not by their extent of destructiveness, but by the amount of unnecessary suffering caused by their use. This is the fundamental principle which the Article embodies. According to this principle, combatants could be



wounded or killed outright but not tortured by aggravating their suffering. For example, the use of torpedos was lawful and permissible even though they could destroy the entire crew of the warship of a navy but the deliberate use of sulphuric acid or of nails, blades, splinter grenades, etc., in the head of a bullet has always been a gross violation of the laws of war because apart from disabling the person attacked, it would cause unnecessary suffering to him. In this context, it is easy to appreciate the fact that no objection was raised to the use of hand grenades in the Russo-Japanese war of 1904-5, but the resort to expanding bullets in the South African war was regarded by both England and the Boers as a barbarous violation of international law,<sup>21</sup> and the Hague Convention of 1899 in particular.

Another article worthy of mention is Article 22 in both Hague Conventions relating to the laws and customs of war on land (1899 II, 1907 IV) which provides that, "the right of belligerents to adopt means of injuring the enemy is not unlimited."<sup>22</sup> Perhaps the only limitation is determined by the charter of the Nuremburg Tribunal.<sup>23</sup> Article III of the Convention of 1907, provides the only penalty for any breach of the Convention, by one of the contracting parties. The Article reads:

A belligerent party which violates the provisions of said Regulations shall if the case demands, be liable to make compensation. It shall be responsible





for all acts committed by persons  
forming part of its armed forces.<sup>24</sup>

This in effect means that the contracting powers will make indemnities on the acts of their armed forces contravening the Convention. The Convention contained no provision investing Courts with jurisdiction that would empower them to impose indemnities on the offending parties.

The Convention of 1899 and 1907 is regarded by some writers as declaratory of a fundamental principle of International Law.<sup>25</sup> Others<sup>26</sup> are of the opinion that the Declaration (1899) is limited to "projectiles, the sole object of which is the diffusion of asphyxiating or deleterious gases." In 1923, Manisty, while addressing the members of the Grotius Society, on "The Use of Poison Gas in War," duly asked:

"Did the Convention of 1907 simply declare what in the opinion of the representatives of the powers signing the Conventions were the then existing laws and customs of war; or did the Convention create a new code of rules of conduct to be observed by belligerents in their relations with each other during the course of the war?"<sup>27</sup>

The answer to the question left "some doubt and difficulty."<sup>28</sup> But there was no doubt in O'Brien's mind when he maintained that the Hague Conventions of 1899 and 1907 "represent the consensus among European nations," before and after the Conventions, that the use of poison and poisoned weapons was considered barbaric, and was outlawed among civilized nations.<sup>29</sup> By way of observation, one may note that the





Declaration<sup>30</sup> was generally disregarded by both sides in the First World War; in fact, it did not survive the war as an effective conventional restraint on gas. This was why I.C.R.C. made its appeal on February 6, 1918 before the end of the war. The appeal among other things said:

Far from attenuating the evils of war, progress in the science of aeronautics, ballistics and chemistry might well be said only to have aggravated suffering and especially to have extended it to all the population so that war will soon be all-destroying and without mercy. We wish to-day to take a stand against a barbaric innovation which science is bringing to perfection that is to say making it more lethal and more subtly cruel. This innovation is the use of asphyxiating and poisonous gas, which will it seems, increase to an extent so far undreamed of.<sup>31</sup>

It is estimated that 12,000 tons of lachrymatory (tear) gas were used in the First World War.<sup>32</sup> The Hague Conventions narrow scope - which invites strict interpretation - renders it inadequate to deal with numerous weapons which are available under the general heading of CBW. For example, the term "projectiles," was of a narrow compass as it did not take into account smoke pots and similar disseminating devices that were used to spread gases during the First World War.<sup>33</sup>

The terminology of Article 171 of the Treaty of Versailles which terminated the war was employed by the drafters of both the Washington Treaty relating to the Use of Submarines and Noxious Gases in Warfare of 1922, and the



Geneva Protocol of 1925. A provision in Article 5 of the Convention on the Limitation of Armaments of Central American States signed in Washington in February 1923 prohibits the use in warfare of

. . . asphyxiating gases, poisonous or similar substances as well as analogous liquids, materials or devices.<sup>34</sup>

This treaty was not registered with the Secretariat of the League of Nations,<sup>35</sup> and was not binding on members.<sup>36</sup> The United States refused to ratify the Treaty of Versailles primarily because of its provisions creating the League,<sup>37</sup> but Article 171 was incorporated by reference in the 1921 Treaty of Berlin between the United States and Germany.<sup>38</sup>

In the Draft Washington Treaty on Submarines and Noxious Gases of February 6, 1922, which dealt with limitation of armaments and to which the United States of America, the British Empire, France, Italy and Japan were signatories, Article V declared:

The use in war of asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices, having been justly condemned by the general opinion of the civilized world, and a prohibition of such use having been declared in treaties to which a majority of the civilized powers are parties; the signatory powers, to the end that this prohibition shall be universally accepted as a part of international law binding alike the conscience and practice of nations, declare their assent to such prohibition and agree to be bound thereby as between themselves and invite all other civilized nations to adhere thereto.<sup>39</sup>



This article was based upon a United States proposal and was adopted after representations from U.S. Secretary of State Hughes,<sup>40</sup> who later with the assistance of Senator Root eventually persuaded the Senate to approve the treaty. The Senate unanimously consented.<sup>41</sup> The treaty was to come into effect only if ratification was unanimous, and as it never was, the treaty never came into force. The United States ratified it on June 9, 1925; France failed to ratify it, not because of Article V, but because of the limitations it imposed on submarines. It also failed to receive statutory ratification in the United Kingdom.

In 1923, the United States and seventeen other states adopted a resolution at the 5th International Conference of American States at Santiago, Chile, recommending that governments "reiterate" the prohibition of the use of CBW weapons mentioned in the Treaty of Washington.<sup>42</sup>

The pre-Geneva (1925) conventional treaties are extremely limited as sources of legal restraint on CW. They in fact did not regulate the "use of bacteriological methods of warfare" which the Geneva Protocol of 1925 extended its prohibition.

#### The Geneva Protocol of 1925

The Geneva Protocol is by far the most significant





treaty relating to the prohibition of CBW. The Conference which gave birth to the Treaty was formally concerned with the problem of "International Trade in Arms and Ammunition and in Implements of War."<sup>43</sup> The Conference did not mention CBW in its definition of "war." Instead it was during the debate for and amendment to Article 1 of the Convention, introduced by the United States delegate, Mr. Burton, that General Sosnkowski of Poland urged the delegates to add "bacteriological warfare" to the amendment.<sup>44</sup> This was received with unanimity and enthusiasm.<sup>45</sup>

The delegates admitted that, in practice, CBW weapons were difficult to prohibit, since substances used often had legitimate uses. Moreover, if CBW agents were prohibited or used illegally, a nation which lacked the means to retaliate in kind would be at an unjust disadvantage if it could not import CBW weapons. Realizing the importance of the prohibition of the CBW agents of warfare, the Conference decided to prepare a separate Protocol instead of including references to CBW in the convention for which the Conference was organized. The Protocol of 1925 thus came into being. The Protocol states, inter alia,

Whereas the use in war of asphyxiating, poisonous or other gases and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilized world; and whereas the prohibition of such use has been declared in Treaties to which the majority of the powers of the world are



Parties, and To the end that this prohibition shall be universally accepted as a part of International Law; binding alike the conscience and practice of nations; Declare that the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.<sup>46</sup>

Eighty-four countries<sup>47</sup> have agreed to the terms of the Protocol. All members of N.A.T.O. except the United States and all the members of the Warsaw Pact including the Soviet Union are parties. China (Peking), a non-member of the U.N. has ratified the Protocol. All European States except Albania have ratified or acceded to the Protocol. Brazil, Salvador, Nicaragua and Uruguay have not ratified and of the major industrial powers only the United States and Japan have not ratified to date. On November 25, 1969 President Nixon said that he would "submit to the Senate, for its advice and consent to ratification, the Geneva Protocol of 1925."<sup>48</sup> The United States will, according to the President, confine its biological research to defensive measures, e.g., immunization and safety measures. He asked the Department of Defense to make recommendations as to the disposal of existing stocks of bacteriological weapons, and finally remarked that "the United States associates itself with the principle and objectives of the United Kingdom



Draft Convention, which would ban the use of biological methods of warfare."<sup>49</sup> In another White House<sup>50</sup> press release dated August 19, 1970, the President said that he has resubmitted the Protocol of 1925 for Senate approval. The Secretary Roger's Report<sup>51</sup> that followed two days after recommended the following reservation to any U.S. ratification:

That the said Protocol shall cease to be binding on the Government of the United States with respect to the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, in regard to an enemy State if such State or any of its allies fails to respect the prohibition laid down in the Protocol.

Though the Protocol is still waiting Senate approval, it is more likely than not that the Senate consent will be secured eventually.

The Protocol of 1925 gave partial form to the 1899 and 1907 Hague Regulations by forbidding the use in war of "asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices."<sup>52</sup> Realizing that the Hague Regulations were drafted in ignorance of the nature of CBW, one would expect this weakness to be remedied by the 1925 Protocol. It is obvious that certain weapons and tactics used in the actual waging of war in 1899 or 1907 might be obsolete in 1925.<sup>53</sup>

In practice, the "custom" of major powers to employ chemical warfare as biological warfare had not been suffi-





ently developed to give rise to any pattern or practice. A reading of the proceedings of the Conference leaves little doubt that the delegates believed CBW weapons to have already been prohibited by a number of international agreements<sup>54</sup> and customs. If before 1925 nations believed that CBW had been banned by custom, one should question the expediency in restating it in treaty law, and why major military powers attach conditions to their ratifications when they could as well attach express reservations to a customary rule.<sup>55</sup>

A.V.W. Thomas and A.J. Thomas Jr. commenting on this said:

. . . if customary international law had already outlawed gas warfare it is paradoxical that the present protocol should be so concerned with a provision stating that it came into force for each signatory power only from date of deposit of ratification. This is like saying that a customary rule of international law must be accepted by states in a treaty before it is binding at international law.<sup>56</sup>

Practice of nations between the Hague Conventions and the Geneva Protocol of 1925 indicate that neither treaty law nor customary international law prohibits CBW.

The reservations of the signatory powers restrict the universal character of the acceptance of the customary rule believed to ban gas warfare. These reservations are phrased with great care. This might be due to the provision in the Protocol which indicates that parties "agree to be bound as between themselves."<sup>57</sup> France, the first nation to





ratify, maintained in her reservation that the Protocol only binds the Government of France in relation to "states which have signed or ratified it or which may accede to it."<sup>58</sup> The first part of the reservation is a restatement of a mutuality of obligation already in the Protocol.<sup>59</sup> The French second statement reads:

The said Protocol shall ipso facto cease to be binding on the Government of the French Republic in regard to an enemy state whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.<sup>60</sup>

This reserves for France a right of "reciprocal reprisal" against non-parties and parties who use it. This permits A, a party to use gas against B, a non-party, and its ally, C, if B uses gas against A in a war. The reservations of other countries follow the French pattern except for slight variation in a few of them. The Canadian and Soviet reservations speak of "allies de jure." The addition of de jure to the "allies" seems to give Canada and the Soviet Union the right to use gas against any allies of a signatory or a non-signatory, whether they violate the Protocol or not, in a situation of "anticipatory attack."<sup>61</sup> The British reservation which does not fall directly within either the French or Soviet pattern, states that that country will be bound only to those states which have ratified or acceded to the Protocol "permanently." This in essence, excludes reciprocal obligation between the United Kingdom and States that ratify



or accede to the Protocol "temporarily." This precaution is perhaps unnecessary and it is unlikely that States will accede or ratify the Protocol only on temporal basis. The ratifications (with reservations) in order to be binding, must be brought to the knowledge of the other contracting powers and receive their approval, unless otherwise specified in the treaty, since they constitute a modification of the agreements.<sup>62</sup> What if a party to the Protocol objects to the reservation of another signatory power?<sup>63</sup>

There is the certainty that the Soviet Union and its allies, Great Britain and several Commonwealth nations, Belgium and the Netherlands, who ratified the Protocol after France and are bound by it, knew the limitation on obligations of France under the Protocol, and accepted such limitation. But the position of such countries as Liberia, Italy and Venezuela is different. They ratified without reservations though after Canada but before the Soviet Union. Are they bound by the Soviet reservation, especially paragraph two? These countries raised no objection to the reservation "by the end of a period of twelve months after it was notified of the reservation or by the date on which it expressed its consent to be bound by the Treaty, whichever is later."<sup>64</sup> It seems that by implication these countries have accepted the limitation imposed by the Soviet reservation.

In 1966 U.N.G.A. Resolution 2162 (XXI) called on all



states to accede to the Geneva Protocol of 1925. This was reaffirmed at the 1750 Plenary Meeting of December 20, 1969 in Resolution 2454 A (XXIV).

On December 16, 1969, the U.N.G.A. adopted Resolution 2603 A (XXIV) restating its recognition "that the Geneva Protocol embodies the generally recognized rules of international law prohibiting the use in international armed conflicts of all biological and chemical methods of warfare, regardless of any technical developments . . . ." <sup>65</sup> The resolution was adopted by eighty votes to three (the United States, Australia and Portugal), with thirty six abstentions. <sup>66</sup>

The First Committee of the General Assembly discussed two draft proposals on CBW prohibition. The first introduced by the Soviet Union and eight other Communist countries called for the prohibition of the development, production, and stockpiling of chemical and bacteriological weapons and for the destruction of such weapons. <sup>67</sup> The Soviet proposal did not make any provisions for proper verification. The United Kingdom Draft Convention called for the prohibition of biological methods of warfare and a ban on the development, production, and stockpiling of biological agents. <sup>68</sup> Unlike the Soviet proposal, the British essentially separated BW from CW. The President <sup>69</sup> of the U.S. had associated his country with the British Draft Proposal primarily because of





its ban on only BW. The U.N. General Assembly forwarded the two draft conventions to C.C.D. without a stated preference for either.<sup>70</sup>

In the same year, the Secretary-General, U Thant made the following three recommendations to all States:

- (1) To renew the appeal to all states to accede to the Geneva Protocol of 1925.
- (2) To make a clear affirmation that the prohibition contained in the Geneva Protocol applies to the use in war of all chemical, bacteriological and biological agents (including tear gas and other harassing agents) which now exist or which may be developed in the future.
- (3) To call upon all countries to reach agreement to halt the development, production and stockpiling of all chemical, bacteriological and biological agents for purposes of war and to achieve their effective elimination from the arsenal of weapons.<sup>71</sup>

The U.N. Resolutions, like the 1925 Protocol, are silent on the domestic use of tear gas. They have moral effects on the customs of nations on the use of CB weapons. The Geneva Protocol, so far as rules of customary international law, it applicable to members and non-members alike. To what extent have the U.S. and Japan (major industrial non-members) regarded the rules in the Protocol as customs, obligatory and right? The United States did not use any gas in either Korea or the Second World War.<sup>72</sup> In 1966, it sponsored and voted for the U.N.G.A. Resolution 2162 (XXI)<sup>73</sup> and a United States delegate while supporting it said that "while the United States is not a party to the Protocol, we



support the worthy objectives which it seeks to achieve."<sup>74</sup> Another U.S. Ambassador to the U.N., Arthur J. Goldberg, said in connection to U.N. Resolution 2162 B of 1966, that "the United States position on this matter [poison gas] is quite clear and corresponds to the stated policy of almost all other governments throughout the world as reflected in the voting (91 in favour and 4 abstentions) which condemned the use of poison gas in warfare. The use of poison gases is clearly contrary to international [customary] law."<sup>75</sup>

Is the U.S. in practice in keeping with its professed position? Falk in his "Six Categories of Legal Issues," relevant to an appraisal of the United States involvement, maintained that the U.S. involvement in Vietnam is illegal, under the Charter of the U.N.<sup>76</sup> The United States is conducting the war in multiple violations of minimum standards of legal restraints embodied in the Hague Conventions of 1907 and the Four Geneva Conventions of 1949.<sup>77</sup> Falk suggested that the Nuremburg Arguments, are relevant to the American situation,<sup>78</sup> and so the government leaders should be prosecuted for "crimes against peace," because leaders in "the United States and South Vietnam are responsible for the commission of aggression against North Vietnam subsequent to February 1965." Secondly, they should be tried for "war crimes" because of their "search and destroy missions, free bombing zones, forceable transfer of the civilian population



and mistreatment of prisoners."<sup>79</sup> And lastly they should be tried for "crimes against humanity," because "specific violations of the law of war have a cumulative impact that can fairly add up to genocide."<sup>80</sup> The defoliants and crop-killing chemicals used to deprive the Viet-Cong of cover and food may be considered technical violations of the 1925 Geneva Protocol.<sup>81</sup>

Japan did not use any gas during the Second World War.<sup>82</sup> Its representative also voted for the 1966 U.N.G.A. Resolution calling for "strict observance by all states of the principles and objectives" of the Protocol. Japan's court has maintained in the case Shimoda v. State (Tokyo Dist. Ct. December 7, 1963), by way of a dicta that the use of poison gas and bacteria in war violated international law. The Japanese action after the World War II shows an intention to be bound by the Protocol which it has not ratified.

Writers disagree on whether both CW and BW are banned by international custom or not. O'Brien maintained that it was the customary international law that forbids the "first use" of chemical weapons that dissuaded States from their use. But there is no customary international law prohibiting biological agents.<sup>83</sup> John Tucker seems to agree with O'Brien when he concluded that a customary rule existed against only "poisonous or asphyxiating gases."<sup>84</sup> Schwarzenberger had the opposite view. He disagreed with O'Brien and





Tucker, and rather believed that custom prohibited both chemical and bacteriological warfare. He wrote in his book "The Legality of Nuclear Weapons" that:

The prohibition of chemical and bacteriological warfare contained in the Protocol must be taken to be merely declaratory of International Customary law, and equally binding on all States. It then becomes irrelevant whether any particular State is a party to the Geneva Protocol of 1925.<sup>85</sup>

Greenspan seems to support Schwarzenberger when he concluded that the Protocol is "universally recognized" that it "must be regarded as binding the community of nations independently of treaty obligation."<sup>86</sup> Julius Stone's view is that "the prohibition on bacteriological warfare operated in such a war will depend upon the willingness of that State to accept voluntarily the self-denying ordinance of the Protocol."<sup>87</sup> If the stand of O'Brien, Tucker and others is correct it implies that the non-adherents to the Protocol have the right of "first use" of bacteriological weapons. This right is denied to the adherents. The general practice after the Second World War seems to regard both chemical and biological warfare as banned by customarily international law to be respected by all States. For example, a Soviet military tribunal sitting in Khabarovsk in December 1949 convicted a number of Japanese for engaging in bacteriological warfare against the Mongolian People's Republic in 1939 and against the Chinese in 1940-42.<sup>88</sup> It seems that the Russian Military





Tribunal in Khabarovsk in 1949 had assumed that that bacteriological warfare is prohibited by international customary law, since Japan is not a party to the Protocol.<sup>89</sup>

### Tear Gas and Herbicides

In 1924, a special sub-committee of the League of Nations, a temporary mixed commission, was set up to study the effects which would be produced by the use of chemical and bacteriological weapons, and to give an accurate conception of the dangers which would arise from their use in war. After the necessary consultations, the sub-committee classified CBW agents into three classes: irritant (lachrymatory), sneeze-producing and blistering agents; suffocating or asphyxiating agents; and toxic agents. This report was brought before the Conference for the supervision of the International Trade in Arms and Ammunition and Implements of War, convened at Geneva on May 4, 1925.<sup>90</sup>

The tear gas controversy first started on December 2, 1930, at the twentieth meeting of the Sixth Session (Second Part) of the League of Nations Preparatory Commission for the Disarmament Conference. With the presentation of a memorandum by the British delegation, the delegation referred to the English text of the Geneva Protocol of 1925 which said:



Basing itself on this English text the British government have taken the view that the use of "other" gases including lachrymatory gases were prohibited. They also considered that the intention was to incorporate the same prohibition in the present convention.<sup>91</sup>

The French held virtually the same position as the British although differently worded:

- I All the texts at present in force or proposed in regard to the prohibition of the use in war of asphyxiating, poisonous, or similar gases are identical. In the French delegation's opinion, they apply to all gases employed with a view to toxic action on the human organism, whether the effects of such action are a more or less temporary irritation of certain mucous membranes or whether they cause serious or even fatal lesions.
- II The French military regulations, which refer to the undertaking not to use gas for warfare (gaz de combat) subject to reciprocity, classify such gases as suffocating, blistering, irritant and poisonous gases in general and define irritant gases as those causing tears, sneezing, etc.

The French government therefore considers that the use of lachrymatory gases is covered by the prohibition arising out of the Geneva Protocol of 1925. The fact that for the maintenance of internal order, the police, when dealing with offenders against the law, sometimes use various appliances discharging irritant gases cannot, in the French delegation's opinion, be adduced in a discussion on this point since the Protocol or Convention in question relates only to the use of poisonous or similar gases in war.<sup>92</sup>

The dispute as to what the Protocol meant by "other gases" might have been provoked by a discrepancy between the



English and French versions of the Protocol. The French word "similaires" (with reference to gases) appeared in the English text as "other." Thus, the French version seemed to be more restrictive than the English, though the Protocol intended "similaires" to have the same meaning as "other." Nevertheless France and Britain took the position which was perhaps meant by the drafters of the Protocol. The United States delegate, Mr. Gibson, expressing some doubts over the French and British interpretation said:

I think there would be considerable hesitation on the part of many Governments to bind themselves to refrain from the use in war, against an enemy of agencies which they have adopted for peace-time use against their own population, agencies adopted on the ground that, while causing temporary inconvenience, they cause no real suffering or permanent disability, and are thereby more clearly humane than the use of weapons to which they were formerly obliged to resort to in times of emergency.<sup>93</sup>

Gibson suggested that a Preparatory Commission be set up "in order to give this entire subject careful study and consideration,"<sup>94</sup> in order that members be equipped with "adequate knowledge of the problem in all its aspects."<sup>95</sup> Ten of the twenty-eight States that had ratified the Protocol at the time of this Disarmament Conference associated themselves with the position of France and Britain. The Special Committee which studied Gibson's proposal said:

There should be included in qualitative disarmament the use for the purpose of





injuring an adversary, of all natural or synthetic noxious substances, whatever their state, whether solid, liquid or gaseous, whether toxic, asphyxiating, lachrymatory, irritant, vesicant, or capable in any way of producing harmful effects on the human or animal organism, whatever the method of their use.<sup>96</sup>

This recommendation later became part of Article 48 of the draft Convention on the Reduction and Limitation of Armaments,<sup>97</sup> which has the support of the United States,<sup>98</sup> though it never came into force. The 1930 attempt to resolve the difference in meanings between the French and English texts seemed to have achieved nothing. In the League of Nations Preparatory Commission for Disarmament Conference of 1932, the Spanish delegate remarked:

I agree with the British delegations interpretation because I think that the text approved at the second reading is so clear that it cannot give rise to any objections. It provides that the use in warfare of any kind of gas is prohibited, doubtless because it is very difficult to distinguish between lethal and non-lethal gases.<sup>99</sup>

The Yugoslavian delegate also agreed with the interpretation given by the British delegate.<sup>100</sup> According to Phillip Noel-Baker's<sup>101</sup> letter to the Editor of the New York Times,<sup>102</sup> the United States' new delegate, Hugh R. Wilson, to this Disarmament Conference declared that the U.S. government agreed that the use of all tear gases was banned by international law. This was a change from Gibson's position in 1930. It is debatable whether the use of tear gas and herbi-



cides is permitted in war and domestic disturbances by the Protocol of 1925. If the word "other" was intended to mean "similaires," one could make a deductive argument that tear gas and herbicides could either be the "other" chemicals "similar" to the "asphyxiating and poisonous" chemicals<sup>103</sup> or they could be some of the "analogous liquids, materials or devices . . ." <sup>104</sup> covered by the Protocol. This was the initial French<sup>105</sup> and British<sup>106</sup> view, but they changed, as I explain below, to the opposite view of the United States in the later sixties and early seventies. Evidence showed that by 1965, over 50 countries were using tear gas to quell domestic riots and capture criminals resisting arrests - while the United States' major herbicides - "orange," "blue" and "black" - continue to pour "rains of destruction" in Asia.

The United Nations General Assembly Disarmament Conference and British Parliamentary debates from 1966 to 1970 show that there has been a change of British and French position from that of the 1930's, and increased opposition to the U.S. position came actively from the Soviet Union and its allies.<sup>107</sup> The French mentioned that they no longer believed in the 1930 interpretation they gave to the Protocol,<sup>108</sup> while the United Kingdom mentioned the opposite views without taking sides,<sup>109</sup> while most nations remained silent. The French delegate to the 1966 U.N. Disarmament



Conference stated that a "condemnation of chemical weapons in general" might not be "predicted upon the text of the Geneva Protocol"<sup>110</sup> and it was difficult to demand "that States which have not signed or ratified a treaty or convention comply with its principles or norms."<sup>111</sup>

The United States position, as declared by Gibson in 1930, or Nabrit in 1966 has been consistent in its refusal to acknowledge that herbicides and tear gas are banned. Nabrit, addressing the U.N.G.A. on December 5, 1966 said inter alia that:

. . . the Protocol does not apply to herbicides, which involve the same chemicals and have the same effects as those used domestically in the United States, the Soviet Union and many other countries to control weeds and other unwanted vegetation.<sup>112</sup>

As regards ban on tear gas Nabrit said:

Protocol was formed to meet the horrors of poison gas warfare in the First World War, and was intended to reduce suffering by prohibiting the use of poisonous gases such as mustard gas and phosgene. It does not apply to all gases. It would be unreasonable to contend that any rule of international law prohibits the use in combat against an enemy, for humanitarian purposes, of agents that Governments around the world commonly use to control riots by their own people.<sup>113</sup>

This view was opposed by the Soviet Union and its allies.<sup>114</sup>

Another view favourable to the United States position is one which maintains that the military use of anti-





plant chemicals was unknown by 1925. The drafters of the Protocol did not intend to exclude what (all plant-destroying agents) they did not know. It is reasonable to suggest that the terms "other," "similaires" gases, and "all analogous liquids, materials or devices . . ." found in the Protocol are sufficiently wider to cover future developments in CBW. The United States position maintains that the Protocol does not ban the use of gas for domestic purposes, or its "use in combat against an enemy for humanitarian purposes."<sup>115</sup>

The Protocol does not ban the manufacture of CB agents, nor does it make any provisions for anybody to inspect or verify the existency of any stock of such weapons. It seems that it has been the international customary law for parties and non-parties alike to stock banned weapons like bacteriological agents as it may be necessary to use them by way of retaliation in kind. Even in an undertaking not to "possess, construct or experiment with any atomic weapons"<sup>116</sup> as was the case in the Peace Treaties of 1947 with Italy, Bulgaria, Finland, Hungary and Rumania, "it is a matter of the intention of the parties whether the Powers which are the beneficiaries of these rights are entitled individually, vis-a-vis themselves to release the obligated States, or may do so only by their joint action."<sup>117</sup>

The present situation in which nations manufacture and stockpile banned weapons and where their use in self-





defence, hot pursuit and retaliation are legal, makes the findings on the legality or illegality of CB weapons seem illusory. Greater reliance should be placed on the International Customary law that respects the rules in the Geneva Protocol of 1925.



Table III

STATES PARTIES TO THE PROTOCOL FOR THE PROHIBITION OF THE USE IN WAR OF ASPHYXIATING,  
POISONOUS OR OTHER GASES AND OF BACTERIOLOGICAL METHODS OF WARFARE, DONE AT GENEVA JUNE  
17, 1925

States	Dates of Ratification or Accession	With Reser- vation	Bound as the Result of Succession Agree- ments Concluded by them or by Reason of Notifications Given to them to the Secretary-General of the United Nations	Remarks
Argentina	May 12, 1969			
Australia	January 22, 1930	X		
Austria	May 9, 1928		X	
Barbados				
Belgium	December 4, 1928	X		
Botswana			X	
Bulgaria	March 7, 1934	X		
Burma			X	
Canada	May 6, 1930	X		
Ceylon	January 20, 1954			
Chile	July 2, 1935	X		
China	August 7, 1929			
China Democratic People's Rep.	August 9, 1952	X		
Cuba	June 24, 1966			
Cyprus	December 12, 1966			
Czechoslovakia	August 16, 1938	X		
Denmark	May 5, 1930			
Estonia	August 28, 1931	X		
Ethiopia	September 18, 1935			



States	Dates of Ratification or Accession	With Reser- vation	Bound as the Result of Succession Agree- ments Concluded by them or by Reason of Notifications Given to them to the Secretary-General of the United Nations	Remarks
Finland	June 26, 1929			Applicable to all French territories
France	May 9, 1926	X		
Gambia, The	November 16, 1966			
Germany, Fed. Rep.	April 25, 1929			
Ghana	May 3, 1967			
Greece	May 30, 1931			
Guyana			X	
Holy Se	October 18, 1966			
Hungary	October 11, 1952			
Iceland	November 2, 1967			
India	April 9, 1930	X		
Indonesia			X	
Iran	July 4, 1929			
Iraq	September 8, 1931	X		
Ireland	August 18, 1930	X		
Israel	February 20, 1969	X		
Italy	April 3, 1928			
Jamaica			X	
Latvia	June 3, 1931			
Lebanon	April 17, 1969			
Lesotho			X	
Liberia	April 2, 1927			
Lithuania	June 15, 1933			
Luxembourg	September 1, 1936			
Madagascar	August 12, 1967			
Malawi			X	





States	Dates of Ratification or Accession	With Reser- vation	Bound as the Result of Succession Agree- ments Concluded by them or by Reason of Notifications Given to them to the Secretary-General of the United Nations	Remarks
Malaysia			X	
Maldivé Islands	January 6, 1967			
Malta			X	
Mauritius			X	
Mexico	March 15, 1932			
Monaco	January 6, 1967			
Mongolia	December 6, 1968	X		
Nepal	May 9, 1969			
Netherlands	October 31, 1930	X		Applicable to Surinam and Curacao
New Zealand	January 22, 1930	X		
Niger	April 19, 1967			
Nigeria	October 15, 1968	X		
Norway	July 27, 1932			
Pakistan	June 9, 1960			
Paraguay	January 14, 1969			
Poland	February 4, 1929			
Portugal	July 1, 1930	X		
Romania	August 23, 1929	X		
Rwanda	June 25, 1964			
Sierra Leone	March 20, 1967		X	
Singapore				
South Africa	January 30, 1930	X		
Spain	August 22, 1929			With declaration
Swaziland			X	
Sweden	April 25, 1930			
Switzerland	July 12, 1932			



Bound as the Result  
of Succession Agree-  
ments Concluded by  
them or by Reason of  
Notifications Given  
to them to the  
Secretary-General of  
the United Nations

Remarks

Dates of  
Ratification  
or Accession

With  
Reser-  
vation

States

Syrian Arab Rep.	December 17, 1968	X	
Tanzania	April 22, 1963		
Thailand	June 6, 1931		
Trinidad & Tobago			X
Tunisia	July 12, 1967		
Turkey	October 5, 1929		
Uganda	May 24, 1965		
Union of Soviet Socialist Reps.	April 5, 1928		
United Arab Rep.	December 6, 1928		
United Kingdom	April 9, 1930	X	It does not bind India or any British Dominion which is a separate member of the League of Nations and does not separately sign or adhere to the Protocol. It is appli- cable to all colonies.
Venezuela	February 8, 1928		
Yugoslavia	April 12, 1929	X	
Zambia			



### Footnotes to Chapter III

<sup>1</sup> See Higgins, The Hague Peace Conferences, p. 6

<sup>2</sup> The adherents were Belgium, Great Britain, Denmark, Italy, Germany, the Netherlands, Norway, Austria, Persia, Portugal, Sweden, Switzerland and Turkey. Hungary may or may not admit to succession of the obligation from Austria-Hungary. Russia was a signatory, but the Soviet Union had refused to admit succession to Tsarist treaties. Brazil adhered to the Declaration of 1869. Belgium was also a signatory. Ibid., p. 7

<sup>3</sup> Schwarzenberger notes that Oppenheim confused and merged the prohibition against poison and poisonous weapons with the prohibition against inflicting superfluous suffering, to the point of thinking that Art. 23(a) of the Hague Regulations prohibited the use of poisoned weapons as well as weapons calculated to cause unnecessary suffering. Schwarzenberger continues: "Subconsciously, this error may have been facilitated by a line of thought which can be traced back at least to Vattel, Le Droit des Gens; Book III, Chapter III, Para. 156, that the use of poisoned arms is not called for the necessities of war, and therefore, amounts to unnecessary cruelty." See Schwarzenberger, The Legality of Nuclear Weapons (London: Stevens and Sons Ltd., 1958) pp. 28-29

<sup>4</sup> See William O'Brien, "CBW and International Law of War," The GLJ, L1 (Fall, 1962), p.17

<sup>5</sup> This is specifically banned by convention.

<sup>6</sup> Spaight, Air Power and War Rights (1947), p. 197

<sup>7</sup> The Manual also says that U.S. is only bound by conventions it ratified. It is therefore not bound by the Geneva Protocol of 1925. See Department of the Army, "The Law of Land Warfare," 18 (FM, 27-10), 1956

<sup>8</sup> See Stone, Legal Controls, p. 552

<sup>9</sup> See Schwarzenberger, The Legality of Nuclear Weapons, p. 111





<sup>10</sup>Declaration (IV, 2) concerning asphyxiating gases was signed at the Hague, July 1899. See Higgins, The Hague Peace Conferences, pp. 39-59

<sup>11</sup>Ibid.

<sup>12</sup>A.P. Higgins, The Hague Peace Conferences, p. 235

<sup>13</sup>E. Castren, "The Present Law of War and Neutrality," (Helsinki, Suomalaisen Kirjallisuuden Seuran Kirjapainon Oy, 1954), p. 195; G. Bunn, "Banning Poison and Germ Warfare: Should the United States Agree?" 2 Wisconsin Law Review V, 1969, pp. 375-76

<sup>14</sup>G. Bunn, "Banning Poison . . .," pp. 375-76

<sup>15</sup>E. Castren, "The Present Law . . .," p. 195

<sup>16</sup>Under the heading "Health Hazards," the U.S. government declared in Atomic Energy that "It had been known for a long time that radioactive materials were dangerous. The amount of radioactive material produced by the fission of uranium in a relatively small chain reacting system may be equivalent to hundreds or thousands of grams of radium. A chain reacting system also gives off intense neutron radiation known to be comparable to gamma rays as regards health hazards. Quite apart from its radioactive properties, uranium is poisonous chemically (emphasis mine). Thus nearly all work in this field is hazardous - particularly work on chain reactions and the resulting radioactive products." See Atomic Energy, published in the U.S.A. by the Government Printing Office, reprinted by H.M. Stationery Officer, London, 1945, p. 25

<sup>17</sup>See No. VI of October 18, 1907 in Higgins, The Hague Peace Conferences, p. 233. The same words are also quoted in each of the four Geneva Conventions of 1949 [1956] in Art. 63 of the First Convention; in Art. 62 of the Second; in Art. 142 of the Third; and in Art. 158 of the Fourth. T.I.A.S., Nos. 3362-65

<sup>18</sup>The Rules of Land Warfare summarized in the U.S. Department Field Manual (1940) comment on Art 23(e) as follows: "The foregoing prohibition (referring to the Article) is not intended to apply to the use of explosives contained in artillery projectiles, mines, aerial torpedoes, or hand grenades, but it does apply to the use of lances with barbed heads, irregular shaped bullets, and projectiles filled with glass or the use of any substance on bullets that would tend unnecessarily to inflame a wound inflicted by them, and to the scoring of the surface or filing off the





ends of the hard cases of bullets." See FM 27-10 War Department Field Manuals - Rules of Land Warfare, published by the U.S. War Department in 1940. For the British objection, see The British Manual of Military Law, pt. III (1958).

<sup>19</sup>See J.W. Garner, "International Law and the World War," 1926, VI. cl. 189, cited in Singh, "The Laws of Land Warfare and Prohibited Weapons and Practices," p. 8

<sup>20</sup>M.L. Greenspan, The Modern Law of Land Warfare (Berkeley: University of California Press, 1959), p. 361

<sup>21</sup>J.W. Garner, "International Law and the World War," 1926, V 1, cl. 189, cited Singh, "The Laws of Land Warfare and Prohibited Weapons and Practices," p. 8

<sup>22</sup>Higgins, The Hague Peace Conferences, p. 233

<sup>23</sup>By Article 6 of the Charter the Tribunal was given authority to try the following crimes:

"(a) Crimes against peace: namely, planning, preparation, imitation or waging of a war of aggression, or a war in violation of international treaties, agreements, or assurances, or participation in a common plan or conspiracy for the accomplishment of any of the foregoing;

(b) War Crimes: namely, violation of the laws and customs of war . . . ;

(c) Crimes against humanity: namely, murder extermination, enslavement, deportation and other inhumane acts committed against any civilian population, before or during the war, or persecutions on political or religious grounds in execution of or in connection with any crime within the jurisdiction of the Tribunal, whether or not in violation of the domestic law of the country where perpetrated

. . . "

Hudson, 9 International Legislation, p. 632

<sup>24</sup>Higgins, The Hague Peace Conferences, p. 213

<sup>25</sup>Lauterpacht says that the Hague Declarations "gave expression, in this particular sphere, to the customary rules prohibiting the use of poison and of material causing unnecessary suffering." See Oppenheim, International Law, II, p. 342



<sup>26</sup>See M. Greenspan, The Modern Law of Land Warfare (Berkeley: University of California Press, 1959), p. 355. See also Stone, Legal Controls, p. 554. Schwarzenberger notes the narrowness of the Declaration and rejects it as a basis for prohibiting nuclear weapons. Schwarzenberger, The Legality of Nuclear Weapons, p. 37. See also Joseph Kunz, "The Laws of War," A.J.I.L., L (1956), 332, Singh, Nuclear Weapons and International Law (1959), p. 154-55

<sup>27</sup>Herbert F. Manisty, "The Use of Poison Gas in War," The Grotius Society, IX (1923), p. 19

<sup>28</sup>Ibid.

<sup>29</sup>See O'Brien, "CBW and International Law of War," 51 G.L.J., No. 1, 1962, p. 21

<sup>30</sup>The Hague Gas Declaration of 1899 was displaced by that of 1907

<sup>31</sup>See I.C.R.C. Bulletin, Geneva, April 1918

<sup>32</sup>R.R. Baxter and Thomas Buergenthal, "Legal Aspects of the Geneva Protocol of 1925." 64 A.J.I.L., N. 5, 1970, p. 854

<sup>33</sup>Hersh, Chemical and Biological Warfare, p. 5

<sup>34</sup>Hudson, 2 International Legislation (1931) p. 945

<sup>35</sup>Ibid., p. 942

<sup>36</sup>Article 18 of the Covenant of the League of Nations. The Covenant can be found in Part 1 of the Treaty of Peace signed at Versailles, June 28, 1919. See Great Britain Treaty Series 1919, No. 4

<sup>37</sup>W.S. Holt, Treaties Defeated by the Senate, 1933.

<sup>38</sup>42 Stat. 1939, 1943 (1921), T.S., No. 658 at 14.

<sup>39</sup>M.O. Hudson, 2 International Legislation (1931), p. 797

<sup>40</sup>See U.S. Conference on the Limitation of Armament, 730, Washington, 1921-22

<sup>41</sup>62 Cong. Rec. 4723-30 (1922)



<sup>4 2</sup>See U.S. Dept. of State, Report of the Delegates of the U.S.A. to the 5th International Conference of American States (1924), p. 196

<sup>4 3</sup>See Text of the Draft Convention submitted to the Conference, Art.1, League of Nations Conference for the Control of International Trade in Arms, Munitions, and Implements of War, Geneva, May 4 to June 17, 1925, December 9, A.B. (1925), pp. 17-18

<sup>4 4</sup>Verbatim Report of the General Committee. First Meeting May 7, 1925, Proceedings. Geneva Arms Conference (1925), p. 29

<sup>4 5</sup>Ibid., pp. 25-31

<sup>4 6</sup>Hudson, 3 International Legislation, (Washington: Carnegie Endowment for International Peace, 1931), pp. 1670-72.

<sup>4 7</sup>See Table III on pp. 88-91

<sup>4 8</sup>LXI The Department of State Bulletin, No. 1590, December 15, 1969, p. 541

<sup>4 9</sup>Ibid.

<sup>5 0</sup>LXIII The Department of State Bulletin, No. 1628, September 7, 1970, p. 273

<sup>5 1</sup>On March 5, 1971, he (Rogers) appeared before the Senate Foreign Relations Committee in an attempt to secure Senate approval said:

. . . We believe U.S. ratification of the Protocol would be an important step in advancing the President's new policy in this area. Ratification would also: - strengthen the legal prohibitions against the use in war of chemical weapons and of biological weapons and toxins;  
- constitute a positive and constructive movement towards arms control and a direct response to United Nations General Assembly resolutions urging all members to become parties to the Protocol;  
- reinforce past U.S. policy statements on no first use of these agents and confirm past U.S. votes in the General Assembly in favor of strict adherence to the principles and objectives of the Protocol; and  
- enhance the U.S. position in developing initiatives for future arms control measures in the chemical and biological warfare area.







See United States Information Service, U.S. Embassy, Ottawa, March 8, 1971; Ibid., p. 274

<sup>52</sup>Hudson, 3 International Legislation (Washington: Carnegie Endowment for International Peace, 1931), p. 1671

<sup>53</sup>In the I.G. Farben Trial, a United States Military Tribunal said, among other things, that technical advancement in the weapons and tactics used in the actual waging of war may have made obsolete in some respects, or may have been rendered inapplicable, some of the provisions of the Hague Regulations having to do with actual conduct of hostilities and what is considered legitimate warfare. U.N.W.C.C. Law Reports, Vol. X, pp. 48-49

<sup>54</sup>See Proceedings of Geneva Arms, pp. 308-312

<sup>55</sup>For express reservation to the Customary Rule of the Movements of Diplomats, See Michael Hardy, Modern Diplomatic Law (Manchester: University Press, 1968), pp. 34-35

<sup>56</sup>A.V.W. Thomas and A.T. Thomas, Legal Limits on the Use of Chemical and Biological Weapons (Dallas: South Methodist University Press, 1970), p. 78

<sup>57</sup>M. Hudson, 3 International Legislation, p. 1671

<sup>58</sup>94 League of Nations Treaty Series (1929), p. 67

<sup>59</sup>Parties . . . agree to be bound as between themselves according to the terms of this declaration.

<sup>60</sup>94 League of Nations Treaty Series (1929), p. 67

<sup>61</sup>The use of "anticipatory attack" in the context used here can be found in Green, "Armed Conflict, War and Self-Defence," 6 ARCHIV, Des Volkerrechts, 1957, pp. 387 & 433

<sup>62</sup>Hackworth, 5 Digest of International Law (1943), sec. 482; McNair, The Law of Treaties (1961), p. 159; Oppenheim-Lauterpacht, International Law, 6th ed. (1944), p. 517

<sup>63</sup>The unanimity rule no longer applies. The "object and purpose" effect the reservation on the treaty now is the valid test. See I.C.J. Report, 1951, p. 15



<sup>64</sup>Comments on "Reservations to Genocide Convention," I.C.J., 1951, pp. 24-26. Also, Article 20 of the U.N. Law of Treaties Convention, Vienna, 1969 maintains that "only express objections invalidates a reservation," U.N. Do. A/Conf. 39/27, May 23, 1969. The U.N. Law of Treaties Convention will be an international rule when all the nations have adopted the Convention.

<sup>65</sup>U.N. Doc. A/PV, 1836 at 16 and 17 (1969).

<sup>66</sup>U.N. Doc. A/PV, 1836 at 16 (1969).

<sup>67</sup>U.N. Doc. A/7655, 19, September 1969.

<sup>68</sup>U.N. Doc. A/7741, 3, November 1969.

<sup>69</sup>LXIII Department of State Bulletin, No. 1628, September 7, 1970, p. 274

<sup>70</sup>G.A. Resolution 2603 (XXIV), 16 December, 1969.

<sup>71</sup>United Nations Papers, "Chemical and Bacteriological Weapons and Effects of Their Possible Use," Preface by the Secretary-General of the U.N., Do. No. A/75 75/Rev. 1, 1969.

<sup>72</sup>The United States employed as an antipersonnel, area-coverage weapons in Vietnam, e.g., napalm, and in World War II and Korea War, jellied gasoline was used. They were not regarded as against international law by the U.S. Army Field Manual which states:

"The use of weapons which employ fire, such as tracer ammunitions, flame throwers, napalm and other incendiary agents, against targets requiring their use is not violative of international law."

U.S. Army Field Manual, 27-10. Greenspan and Falk are against this view. Greenspan, op. cit., p. 361; Falk, 2 Vietnam and International War, p. 503

<sup>73</sup>See U.N.G.A. statement of U.S. Representative, Nabrit in 1966 Documents on Disarmaments, 800-801

<sup>74</sup>Ibid., p. 801

<sup>75</sup>90th Cong. 1st Sess. 55 (1967).

<sup>76</sup>See the Charter argument on p.

<sup>77</sup>Ibid., p. 239



<sup>78</sup>Ibid., p. 250

<sup>79</sup>Ibid., p. 251

<sup>80</sup>R. Falk, "Six Legal Dimensions," p. 25

<sup>81</sup>L.C. Petrowski, "Law and Conduct of Vietnam War," in Vietnam War and International Law, p. 505

<sup>82</sup>21, U.N. G.A.O.R., 1st Comm. 201, 1966

<sup>83</sup>W. O'Brien, "CBW and International Law," p. 59

<sup>84</sup>R. Tucker, "The Law of War and Neutrality at Sea" in 16 International Law Studies (1955), pp. 52-53

<sup>85</sup>G. Schwarzenberger, The Legality of Nuclear Weapons, p. 38

<sup>86</sup>Greenspan, The Modern Law of Landwarfare, p. 354

<sup>87</sup>Stone, Legal Controls, pp. 556-557

<sup>88</sup>Oppenheim-Lauterpacht, 2 International Law, 7th ed. p. 343.

<sup>89</sup>According to Oppenheim-Lauterpacht this view was supported by the British Military Manual, ibid., 34

<sup>90</sup>The Geneva Protocol of 1925 prohibited the use in war of asphyxiating, poisonous or other gases, and of bacteriological methods of warfare. Since asphyxiating and poisonous gases were specifically mentioned, the word "other" became controversial. What gases came under it and what gases did not come under it became the point of dispute.

<sup>91</sup>League of Nations, Documents of the Preparatory Commission for the Disarmament Conference (Series X): Minutes of the Sixth Session (Second Part), 311 (1931).

<sup>92</sup>Ibid.

<sup>93</sup>Documents of the Preparatory Commission, op. cit., pp. 311-314

<sup>94</sup>Ibid., p. 312

<sup>95</sup>Ibid.





<sup>96</sup>League of Nations, Conference for the Reduction and Limitation of Armaments: Conference Documents 210 at 214 (1932)

<sup>97</sup>2 League of Nations Conference for the Reduction and Limitation of Armaments: Conference Documents 476 at 488, (1935).

<sup>98</sup>Minutes of the General Commission (December 14, 1932 - June 29, 1933), 2 League of Nations, Records of the Conference for the Reduction and Limitation of Armaments (Series B), 569 (1933).

<sup>99</sup>Minutes of the League of Nations Preparatory Commission for the 1932-33 Disarmament Conference, meeting in Geneva on January 15, 1932 reproduced in "Hearings before the U.S. Subcommittee on National Security Policy and Scientific Development, op. cit., p. 167

<sup>100</sup>Ibid.

<sup>101</sup>Noel-Baker served in the League of Nations Secretariat and won the Nobel Peace Prize in 1959.

<sup>102</sup>New York Times, December 9, 1969

<sup>103</sup>Even if tear gas and herbicides are not asphyxiating and poisonous, as the mustard gas, they may have similar effects to asphyxiating and poisonous gases. In the case McBoyle v. United States 283, VS. 25 (1931), the phrase "any other self-propelled vehicle not designed for running on rails" include "automobile truck, automobile wagon, motor cycle" because they are all land vehicles.

<sup>104</sup>See Hudson, 3 International Legislation, p. 1671.

<sup>105</sup>Ibid.

<sup>106</sup>See p.

<sup>107</sup>U.N.G.A. First Comm. statement of Belgium Representative Foundation, P.V. 1608 (November 14, 1968)

<sup>108</sup>1966 Documents on Disarmament 798; 21 U.N. G.A.O.R., First Comm. 201 at 204 (1966).

<sup>109</sup>U.K. Working Paper on Microbiological Warfare, E.N.D.C. Doc. 231, at 1-2, 1968

<sup>110</sup>1966 Documents on Disarmament,





<sup>111</sup> Ibid.

<sup>112</sup> U.N.G.A. Statement of U.S. Representative (Nabrit), Documents on Disarmament, 1967, 800 at 801

<sup>113</sup> Ibid.

<sup>114</sup> See U.N.G.A. First Comm. Statement of Soviet Representative Shevchenko in 1967 Documents on Disarmaments 663-66; U.N.G.A., First Comm. Statement of Hungarian Representative Csatorbay in 1966, Documents on Disarmament 734-38. In 1968 Soviet E.N.D.C. Representative Roshchin stated that the Protocol contributed to non-use of gas in the Second World War:

"The Geneva Protocol set a large banner to the use of such [gas and biological] means of mass destruction, and this was of great importance in the Second World War. The warning given by the Powers of the anti-Hitler coalition that the uses of gases and bacteriological means of warfare use inadmissible and that a violator would not go unpunished had its effect on fascist Germany. In giving that warning the Powers of the anti-Hitler coalition based themselves on that important international agreement, The Geneva Protocol of 1925."

Documents on Disarmament, E.N.D.C./P.V. 389 at 25 (August 13, 1968).

<sup>115</sup> See note 112.

<sup>116</sup> Italy: Article 51 (Cmd. 7481 - 1948)  
 Bulgaria: Article 13 (Cmd. 7483 - 1948)  
 Finland: Article 17 (Cmd. 7484 - 1948)  
 Hungary: Article 15 (Cmd. 7485 - 1948)  
 Rumania: Article 14 (Cmd. 7486 - 1948)

<sup>117</sup> G. Schwarzenberger, The Legality of Nuclear Weapons, p. 51.



## Chapter IV

### MILITARY NECESSITY, HUMANITY AND SELF-DEFENCE

#### Military Necessity

The study of the law of war does not only involve going through relevant treaties and studying the few authorities and decisions of national and international tribunals that may exist; it also includes many other approaches. Two distinct approaches will be considered. One is that of the pacifist who denies the legitimacy of war or certain means of warfare. The other is developed by the Kriegsraison school of thought which originated in Germany in the late 19th and early 20th centuries. This school held that raison d'état, the pursuit of national interests, always took precedence over the international law of war. To Kriegsraison, military necessity in the sense of raw military utility must prevail over legal limitations on war. This objective was even made evident in the German Manual of Land Warfare (Kriegsbrach in Landkriege) issued by Grosser Deutscher Generalstab in 1902 which, in many respects, differed from the Hague Regulations of 1899. In this manual, Germany formulated the doctrine of military necessity. By this formulation, a distinction was made between Kriegsraison (raison or "necessity" or "convenience" of war) and Kriegsmanier (custom of war) - the latter binding on the belligerents in ordinary circumstances; the former over-ruling it in special military



danger, or for attaining military success. Military necessity is a rationalization for such "aggression" as the invasion of neutral Belgium in 1914, or the German use of mustard gas at Ypres in 1915.

The German Criminal Law, in keeping with the Kriegs-raison school of thought, made a distinction between "the right of self-defence" (Notwehr), and the state or condition of necessity. When France moved into Tunisian territory in order to advance several operations against the Algerian rebels in 1960, the French justified it on grounds of self-defence.<sup>1</sup> For defensive measures a neutral territory may be used as a sanctuary for tactical retreat. This is perhaps the basis on which the United States has pursued the Vietcong into Cambodia and Laos, where U.S. spray aircraft has defoliated an area which was inhabited by about 30,000 people while pineapple, guava jackfruit and papaya were destroyed.<sup>2</sup>

The Caroline Case<sup>3</sup> has established the circumstances that give rise to a right of hot pursuit in "self-defence." The belligerent must show a "necessity for self-defence, instant, overwhelming, and leaving no choice of means, and no moment for deliberation." According to a note on "International Law and Military Operations against Insurgents" in Neutral Territory from Columbia Law Review:

. . . the Caroline doctrine realistically permits action by a belligerent to protect itself from virtually immediate danger, it





fosters restraint upon the belligerents otherwise less inhibited resort to force. If a neutral's border may be ignored only in extreme situations, the need for the breach can be more easily comprehended and tolerated.<sup>4</sup>

The belligerent in protecting itself against "anticipated" attack should use force proportional to the harm threatened. One wonders if the United States' destruction in Cambodia or Laos is proportional to the harm threatened by the Vietcong.<sup>5</sup> The weakness of the concept of self-defence is that the action in self-defence is likely to remain one of auto-interpretation. For instance, it is the United States alone, that will decide when destruction in Cambodia or Laos is necessary to check "anticipated" attack from Vietcong. While self-defence involves the exercise of a right against aggression, the law of necessity allows a belligerent to violate the right of innocent third parties whenever it is necessary to safeguard his own interest.<sup>6</sup> This distinction is made by more moderate protagonists of the concept of military necessity, who agree that the laws and customs of warfare must ordinarily be respected, but contend that this obligation may be displaced by urgent necessity. When the safety of the armed forces is endangered, then the laws of war may be disregarded, imposing a "hostile license."<sup>7</sup> Who has to decide when it is necessary to abandon the laws of war, and who has to regulate the activities of the armed forces under such military atmosphere? The military Commanding Officer has these responsibil-



ities. The decisions of War Crimes Tribunals, set up by the Allied Powers after both World Wars, show how difficult the responsibilities of the Commanding Officer are when his armed forces are operating under military necessity. It may be necessary to look into some of the cases. Field Marshall Erhard Milch was acquitted by a United States Military Tribunal of being implicated in the conducting of illegal experiments on the ground that it was not satisfied that he knew of their existence and illegal nature. The tribunal did not refer to any duty to ascertain whether they were of such a nature.<sup>8</sup> Similarly in the Trial of Oswald Pohl and others, by a United States Military Tribunal in Nuremburg, the accused, Erwin Tschenscher, who had been a battalion-Commander of a supply column and a company Commander on the Russian front during 1941, was held not to have been responsible for the murder of Jewish civilians and other non-combatants in Poland and in the Ukraine, by members of his commands at that time. The Tribunal found that he had no "actual knowledge"<sup>9</sup> of these offences. Like this case, the judgment delivered in the Hostages Trial<sup>10</sup> by the United States Military Tribunal in Nuremburg provides evidence for saying that a military commander will not usually be permitted to deny knowledge of the contents of reports made especially for his benefits.

The judgments in the above trials show that, in certain military circumstances, the military superior may be



held responsible for the excesses of his subjects, and at others, not. But to what extent he will be responsible is doubtful.

Provisions for collective self-defence in paragraph two of the reservations<sup>11</sup> to the Protocol of 1925 are in keeping with those in some regional organizations - like the NATO and the Warsaw Pact. Article 5 of the charter of NATO provides that an armed attack against one or more of the allies in Europe or North America "shall be considered an attack against them all."<sup>12</sup> A similar provision is in the Warsaw Pact where the Soviet Union has made a promise to its East European allies.<sup>13</sup> The possible use in war of CB agents by a member of N.A.T.O. against a party to the Warsaw Pact could lead to East-West CB warfare. Such warfare in collective self-defence is permitted by Article 51 of the United Nations Charter which maintains that "nothing in the present Charter shall impair the inherent right of individuals or collective self-defence if an armed attack occurs against a member of the United Nations." Does the "inherent right of individuals" or collective self-defence permit any weapons of warfare, legal or illegal? If inherent right of self-defence implies that the right is inalienable and incapable of being surrendered in whole or part,<sup>14</sup> nations or groups of nations may not be required to satisfy the requirement made by the Caroline doctrine in exercise of inherent rights





of individual or collective self-defence. Opinions are divided as to whether resort to chemical weapons, disproportionate to the danger threatened, is allowed or not. While Lauterpacht<sup>15</sup> would agree that any illegal means could be used in a disproportionate manner, Schwarzenberger<sup>16</sup> maintains that "to permit the use of prohibited weapons to a victim of aggression would serve merely to encourage their use by all." O'Brien's<sup>17</sup> opinion is that measures of self-defence should be necessary to counter enemy threat, and the weapons would do to the enemy as the enemy sought to do to the reacting state. The application of the Caroline doctrine protects the interests of neutral nations (especially the weak ones) and the excessive employment of weapons against belligerents in warfare as evident in The Naulilaa Incident.<sup>18</sup> Its weakness is that it restricts the exercise of anticipated attack. In addition certain weapons - nuclear and CB weapons - may proliferate beyond the restricted area, making their use disproportional to the attack, actual or anticipated.

Again, military advocates contend that CBW weapons produce casualties with a minimum of destruction of ancillary targets, such as houses, roads, hospitals etc. This makes the reconstruction of a battered city much easier, thus reducing the civilian suffering.<sup>19</sup> Clarke, for example, has argued for the relative merits of CBW in a situation similar to that in Vietnam. He is of the opinion that the use of nerve gas might





cause a major panic among the guerilla forces, while biological weapons offer a means of preventing subversive infiltration. He recommends the vaccination of all occupants of South Vietnam against a particular disease so that when the disease is spread as an aerosol, indigenous occupants would be protected, but the infiltrators would succumb.<sup>20</sup>

The U.S. Department of the Army has listed six military reasons for employing toxic agents:

- (a) To soften strongly defended enemy positions by using toxic agents to inflict casualties among enemy troops;
- (b) To assist in protecting flanks by contaminating terrain with toxic agents, and thus hampering enemy operations against an exposed flank by forcing the enemy to avoid the area or to accept the risk of casualties from crossing the area;
- (c) To assist in isolating enemy positions by contaminating enemy routes of supply and reinforcement;
- (d) To hinder support of enemy operations by using toxic agents against enemy troops in reserve, assembly or concentration areas, and against enemy artillery, mortar and missile positions or against enemy supply installations or observation posts;
- (e) To hinder or casualize enemy advances by using toxic agents to reinforce natural barriers or engineer obstacles in fixed-type defences; and
- (f) To produce casualty effect with minimum destruction. However, in listing these potential objectives, the Army emphasizes that local commanders to not have the authority to order the use of toxic gas; and that they must be authorized to do so through command channels.<sup>21</sup>



Waging a war against guerrillas who fight in the tunnels requires the use of CBW agents rather than bullets and armoured cars for effective results. This has been explained this way. The cost-effectiveness of the Vietcong guerrilla technique explains why the American military uses these agents against the Vietcong.<sup>22</sup> The cost-effectiveness theory only hold when one knows the entire cost - human, ecological, clinical, genetic, etc., of the use of CB agents in Vietnam. For example, reports and studies made by A.A.A.S. which investigated the cost and nature of damages in Vietnam revealed that some unknown factor has prevented any vegetation from returning to areas attacked with chemical agents in South Vietnam. Other findings include the following:

- (a) At least a fifth of the 1.2 million acres of mangrove forest in South Vietnam have been "utterly destroyed."
- (b) The study under the supervision of Dr. Mathew S. Meselson, Professor of Biology at Harvard University had the following findings:

- (i) Records of 4,002 abnormal births in Saigon Children's Hospital from 1959 to 1968 show a sudden rise in two forms of defect after the start of heavy spraying in 1966. Also the rate of defective births at the Provincial Hospital in Tayminth, a heavily sprayed region, was 64 per thousand compared to 26 per thousand in one of Saigon's better maternity hospitals.
- (ii) An unrecognized factor which the investigators call "nutrient dumping" may make it difficult for the inland jungle to recover once spraying has caused its leaves to fall. The reason is that most of the region's reservoir of plant nutrients is in its vegetation. Little is



stored in the ground.

- (iii) Dr. Meselson estimated that 600,000 people had been cut off from their normal food supply by the spraying of rice fields, and other crops. Most of these, he asserted, are Montagnards rather than Vietcong. The Montagnards are a mountain people, with their own primitive culture and language.<sup>23</sup>

A study, like the U.N. Secretary-General's (see page 114) which shows the table of the economic costs of the use of CB agents does not portray the real costs<sup>24</sup> of their use. It excludes the "unknown" effects of the use of CB agents.<sup>25</sup> The U.S. argument that it is using herbicides in Vietnam "to control weeds and unwanted vegetation, as weed killers used domestically in the United States"<sup>26</sup> is inconsistent with the destructions of rice paddies, which are perhaps grouped as "unwanted."

According to General Giap, in the guerrilla warfare of the first Indo Chinese war, each inhabitant was a soldier, each village a fortress . . . the entire population participated in the armed struggle, fighting, according to the principles of guerrilla warfare in units. Guerrilla tactics range from ambush to sabotage, and when the hostilities extended throughout the country it led to a total war of popular resistance.<sup>27</sup> It is hard to distinguish between a civilian and a combatant when the entire population is involved in the popular resistance. It is doubtful whether the entire people in either the North or South Vietnam are engaged in





a popular resistance. The strategy of bombing villages or spraying herbicides on rice paddies and jungles cannot be justified either by military necessity, which is not "imperatively"<sup>28</sup> demanding or by arguments based on the particular character of guerrilla warfare. The manual on the law of war of the American army declares that it is not forbidden to destroy, by chemical or bacteriological agents which are not injurious to man, harvests destined solely to feed enemy troops, adding cautiously, "if this fact can be established."<sup>29</sup> The parenthesis added is never established before the destruction of the cereal plantations takes place. Besides how does one know when food is destined solely to feed combatants and non-combatants especially where it is erroneously believed that the Vietnam war is a People's war. This is a factor left to the military Commanders to establish.

Military necessity different from the German version<sup>30</sup> has occasionally been taken to denote those exceptional circumstances of practical necessity contemplated by express reservations to be found in several Articles of the Hague Regulations and other conventions.

The various phrases employed by the different conventions seem to confuse the notion of military necessity. Most of the following have been employed indiscriminantly by the drafters: "in case of urgent necessity;"<sup>31</sup> "unless rendered absolutely necessary by military operations;"<sup>32</sup> "should



military operations prevent;"<sup>33</sup> "in so far as military considerations permit;"<sup>34</sup> "so far as operational requirements permit;"<sup>35</sup> "within the bounds set by military or security considerations;"<sup>36</sup> "taking account of the imperative necessities of the securities of the State;"<sup>37</sup> "where absolute military necessity so requires;"<sup>38</sup> "subject to imperative reasons of security;"<sup>39</sup> "subject to urgent reasons of security;"<sup>40</sup> "rendered necessary by imperative military necessities;"<sup>41</sup> "made necessary by imperative military requirements;"<sup>42</sup> "not justified by military necessity."<sup>43</sup> These reservations serve two main functions. First, they acknowledge that certain requirements of the law of war might be impossible of realization. Second, as a consequence, some sort of relaxation of these laws of war is necessary, or else the bonds which these laws impose may be broken "by inexorable reality."<sup>44</sup> Advocates of the principle of humanity may regard these reservations as an excuse for neglect of human consequences in a period of war.

### The Principle of Humanity

The allowance made for military necessity in the conventions seem to render the fate of humanity, which the laws of war seek to preserve, uncertain. In the Hague Convention (II) of 1899 and (IV) of 1907, the contracting powers agreed on such important provisions as the prohibition of the use



of poison or poisoned weapons; the prohibition of killing or wounding an enemy who, having laid down his arms or having no longer any means of defence, has surrendered at discretion; the prohibition of employment of arms, projectiles, or materials calculated to cause unnecessary suffering; the prohibition of pillaging a town or place; the treatment of the armed land forces of the enemy, in case of capture, as prisoners of war.<sup>45</sup> The intent and purpose of these provisions was to humanize operations on land and thereby "diminish the evils of war."<sup>46</sup> How does one reconcile these in light of the allowances made by the same conventions for military necessity<sup>47</sup> which allows human suffering in order to secure military ends? It seems that what the Conventions mean is this: If a civilian suffers death as a result of a military engagement, this is not evil provided that the act itself is not intrinsically evil, and that the evil was unavoidable as a result of the intended good. In this way, the employment of CB weapons (or any other) agents may be justified regardless of the extent of civilian casualties involved, if only it is in pursuit of that which is for the good of a nation.

How reasonable is the destruction of forests, grasslands and agricultural products; the pollution of the rivers and air; and the adverse ecological and environmental effects resulting from the employment of CBW agents in warfare? Why should the use of any chemical or biological weapon, aimed at



ECONOMIC LOSS FROM POSSIBLE USE OF CHEMICAL AND  
BACTERIOLOGICAL (BIOLOGICAL) WEAPONS AGAINST CROPS<sup>1</sup>

Table IV

Economic Loss Which Could Result From the Use of Chemical  
Weapons Due to the Destruction of Crops Per Hectare of Land

Type of Plant	Average harvest (in tons per hectare)	Price of 1 ton in US dollars	Sum total of losses in US dollars per hectare
Cotton . . .	3	\$600	\$1,800
Rice . . .	5	84	420
Wheat . . .	3	69	207
Apple-tree . . .	30	140 <sup>α</sup>	8,400 <sup>α</sup>

<sup>α</sup>Will not produce apples for two years

Table V

Economic Loss Due to the Use of Bacteriological  
(Biological) Weapons Against Crops

Plant	Type of Agent	%	Losses	
			Loss in US tons per hectare	Loss in US dollars per hectare
Wheat ...	Cereal rust (Puccinia graminis)	80	24	\$165
Rice ...	Rice blast (Piricularia drizae)	70	35	294

<sup>1</sup>Chemical and Bacteriological (Biological) Weapons and the Effects of their Possible Use, United Nations, New York, 1969





damaging livestock or agricultural or natural vegetation, not be condemned by all governments of the world? These have been the questions asked by the protagonists of the concept of humanity. They believe that the CBW agents constitute a potential danger of long-term, or even permanent changes to nature and man. As such, they run contrary to the principle of humanity which forbids "the employment of any kind or degree of force which needlessly or unnecessarily causes human suffering and physical destruction."<sup>48</sup> The conclusion of the W.H.O. Report on health aspects of chemical and biological weapons is worthy of attention. It reads inter alia:

Chemical and biological weapons pose a special threat to civilians. This is because of the often indiscriminate nature of such weapons, and because the high concentrations in which they would be used in military operations could lead to significant unintended involvement of the civilian population within the target area and for considerable distances downward.

Despite the W.H.O.'s Report on "Threat to civilians of the use of CB agents" human suffering and physical destruction are normally justified in the context of a "just war." Protagonists of a just war hold that the state is obliged to maintain an environment where men live in peace, practising their religion and pursuing material well-being and intellectual development. If an "aggressor" should threaten to destroy this environment, the government may have no



alternative except to defend the state. A just war may result. The bellum justum doctrine distinguishes objectively between just and unjust wars. If all the conditions of a just war are fulfilled, a just war can either be a war of self-defence against the "aggressor" or a war of execution to enforce one's right. In both cases, it makes no difference whether the just war is, from a military point of view, waged defensively, or offensively. The bellum justum doctrine has some obvious weaknesses. For example, there is the difficulty of determining who is a just belligerent and who is the "injustus aggressor." Each claim made by any belligerent depends on circumstances. Distinctions have been made between "absolute" and "relative," between "objective" and "subjective" justice of belligerents.<sup>49</sup>

In conclusion, it is pertinent to note that the law of war includes the principle of humanity in the definition of military necessity - the former stating in a negative way what the latter asserts affirmatively. The principle of humanity opposes any force which needlessly or unnecessarily causes human suffering. Wars require the use of force. This causes human suffering, and nations use force, whether internally or internationally. Nations use force to engage in deliberate acts of violence which leads to injury, but only proportionate injury to the values of humanity. These values of humanity are to be justified by military necessity



- which again depends on the decision of a responsible military commander. The decision of the military commander depends on the military circumstances surrounding every situation. Under ideal military conditions, the basis of the fundamental concept of legitimate military necessity is the principle of proportionality,<sup>50</sup> in order to avoid "unnecessary sufferings." This is difficult to verify.

Finally, proportionality cannot be judged in the abstract sense. For example, it is not enough to condemn CBW weapons as inhuman or brand them as capable of indiscriminate killings with respect to a given area because many civilians were killed or injured. Rather, it is better to judge the proportionality of such weapons by evaluating alternative means of warfare. When this is done, one may be able to find out if the second alternatives will accomplish the same results with less human casualties.





## Footnotes to Chapter IV

<sup>1</sup>De La Monde, April 27, 1960, p. 5. The French also attempted to justify the aerial attack on Sakiet-Sidi Youssef on February 8, 1958 as an exercise of self-defence, on the ground that Algerian rebels in Tunisia had been shooting at French planes involved while they were over Algeria. See La Monde, February 11, 1958, p. 3. 38 U.S. Department of State Bulletin, 333 (1958).

<sup>2</sup>The London Times, 28/12/70.

<sup>3</sup>J. Moore; 7 Digest of International Law, p. 919

<sup>4</sup>Columbia Law Review Notes, in 2 The Vietnam War and International Law, ed. by R. Falk, p. 576

<sup>5</sup>The Nuremburg War Crimes Tribunal explicitly relied on the Caroline doctrine as authority to reject the claim that the invasion of Norway was a justifiable measure of self-defence. 41, A.J.I.L. 172 (1947), pp. 205-207

<sup>6</sup>N.H.C. Dunbar, "The Significance of Military Necessity in the Laws of War," Juridical Review (Edinburgh), LXVII (1955), p. 204

<sup>7</sup>Ibid.

<sup>8</sup>See Law Reports, IV, 89-91

<sup>9</sup>Ibid., p. 70

<sup>10</sup>See Law Reports, VIII, 71.

<sup>11</sup>See pp. 75-76

<sup>12</sup>62, Stat. 2241 (1949); 2244, T.I.A.S., No. 1964

<sup>13</sup>Treaty of Friendship, Cooperation and Mutual Assistance, May 14, 1955 in Documents on International Affairs (1955), pp. 193-197

<sup>14</sup>Thomas and Thomas, Legal Limits, p. 223

<sup>15</sup>Oppenheim-Lauterpacht, 1 International Law, 7th ed. (1952), p. 371

<sup>16</sup>Schwarzenberger, The Legality of Nuclear Weapons, p. 40



<sup>17</sup>O'Brien, "The Meaning of 'Military Necessity' in International Law, 1 World Polity" (1957), p. 171

<sup>18</sup>2 R.I.A.A., 1012, 1019

<sup>19</sup>Krickus, "On Morality of Chemical and Biological War," p. 206

<sup>20</sup>Clarke, The Silent Weapons, p. 167

<sup>21</sup>U.S. Department of the Army, Tactics and Techniques of Chemical, Biological and Radiological (CBR) Warfare, 72-74 (FM 3-5, 1958).

<sup>22</sup>Clarke, The Silent Weapons, p. 167. Where Vietcong were protected by human shields, or by tunnels or caves, the alternatives were machine guns, napalm, high explosives or grenades. Tear gas is a more humanitarian weapon.

<sup>23</sup>The New York Times, December 30, 1970, pp. 1 and 8. A similar study by Himsworth Committee in Great Britain tried to find out the effects of the use of CS gas in Northern Ireland by British troops. After injecting mice with CS gas hydrogen cyanide was found in their bodies. They concluded that it seems that CS gas in short-run causes cyanide poisoning, and in long-term effects of irritation, shock or stress. The London Times, December 23, 1970, p. 1

<sup>24</sup>Real Costs here include potential and expressed costs.

<sup>25</sup>The Times, 28/12/70.

<sup>26</sup>This is Nabrit's view. See note 112 of chapter 3.

<sup>27</sup>H. Meajrowitz, "The Law of War in Vietnam" in The Vietnam War and International Law, p. 544

<sup>28</sup>Article 23(g) of the Hague Convention forbids destruction "except in cases in which it would be imperatively required by the necessities of war." Higgins, The Hague Conferences, p. 245

<sup>29</sup>F.M. 27-10. Section 36. There are certain services, railroads, bridges, roads, power plants, ports supply depots which serve primarily the needs of civilian population but are also utilized for military. These "mixed targets" can only be destroyed when it is established that they are used "solely" for military purposes.



<sup>30</sup> See CPP 104-105, p.

<sup>31</sup> Convention I, Art. 34, and Convention IV, Art. 57

<sup>32</sup> Convention IV, Art. 53

<sup>33</sup> Convention IV, Art. 3

<sup>34</sup> Convention I, Art. 42, and Convention IV, Arts. 16, 18 and 83.

<sup>35</sup> Convention II, Art. 27

<sup>36</sup> Convention IV, Art. 30

<sup>37</sup> Convention I, Art. 8

<sup>38</sup> Convention IV, Art. 5

<sup>39</sup> Convention IV, Arts. 62 and 78

<sup>40</sup> Convention IV, Art. 63

<sup>41</sup> Convention I, Art. 8

<sup>42</sup> Convention IV, Art. 55

<sup>43</sup> Convention I, Art. 50, and Convention IV, Art. 147

<sup>44</sup> Count Von Moltke, Field Marshall General. Cited in Holland, Letters Upon War and Neutrality, p. 26

<sup>45</sup> Annex to Hague Convention (II) of 1899 and (IV) of 1907, Arts. 23(a), (b), (c), (e). Higgins, The Hague Peace Conferences,

<sup>46</sup> Ibid.

<sup>47</sup> See p. 106

<sup>48</sup> See Tucker, Law of War and Neutrality at Sea (Baltimore Press, 1957), p. 46

<sup>49</sup> Josef L. Kunz, "Bellum Justum and Bellum Legale," A.J.I.L., XLV (1951), 530

<sup>50</sup> O'Brien, Legitimate Military Necessity, pp. 54-57



## CONCLUSION

Prior to the First World War, the law relating to CB weaponry as set down in treaty law was unsatisfactory. The few conventional provisions which are still binding on consenting states, such as Article 23<sup>1</sup> of the Hague Regulations and the Geneva Protocol of 1925, are of too limited a scope to serve as the basis for a general rule on either chemical or biological warfare. For example, there is the possibility of excluding "nuclear weapons," which by contemporary interpretation, fall within the category of "poisonous weapons."<sup>2</sup> Perhaps the drafters of the Hague Regulations did not foresee the effect of technological advancement in such a general term as "poisonous liquids."

The Geneva Protocol is more satisfactory and significant than either the Declaration of St. Petersburg of 1866 or the Hague Conventions of 1899 and 1907, on the following grounds:

- (a) While giving form to the Hague Gas Declarations of 1899 and 1907, it extends its prohibition to BW
- (b) It has created a norm of international behaviour to parties and non-parties in prohibiting the "first use: of CB weapons in war.
- (c) It is a milestone in international arms control.

Though the Protocol has made distinctions between BW and CW, such substances as chemical substances which are biologically





produced chemical substances and yet highly toxic<sup>3</sup> are difficult to classify as purely chemical or biological weapons. In addition the word "bacteriological" found in the Protocol does not encompass toxins or viruses. It covers a narrower range of substances than the terms "biological" or "microbiological."<sup>4</sup> With the research and development on CB agents such distinction may become less helpful in the study of BW and CW and their legal status. Perhaps a preferable approach is a ban on CB weapons and their use in warfare as stipulated in the Soviet Draft Convention of 1969, with provision for verification and supervision added to it. The Reservations of thirty nine countries reserve for them the rights to use CB agents in conditions of individual or collective self-defence and "anticipatory attack." This right is likely to be misused by States in war especially when the CB agents employed are disproportionate to their legitimate military ends. In essence, the Protocol is a "no first use" instrument, rather than a "non-use" instrument. Thirdly, the Protocol seems to allow production, development and stockpiling of CB agents and their use for domestic purposes. This is one of the greatest weaknesses of the Protocol, as States who manufacture, develop or stockpile these CB agents are not contravening the conventional law of CBW and yet they possess what are generally believed to be outlawed by both international law and conventional law. The status of tear gas and



herbicides under the purview of the Protocol requires some specificity in order to secure a consensus between the different interpretations given by States. A uniform and universally acceptable interpretation of the Protocol could be achieved through any of the following devices:

- (1) If States agree voluntarily that tear gas and herbicides are banned by the Protocol.
- (2) If the U.N. under Article 96 of the Charter could seek the Advisory Opinion of the International Court of Justice.
- (3) If the Geneva Protocol of 1925 is revised to satisfy the two factions.

The disagreement over the legal status of "tear gas" has become part of the East-West Cold War. It seems that most members of N.A.T.O. do not regard "tear gas" as banned while the Soviet Union and its allies take the opposite view, that "other" must include gases not properly described as "asphyxiating," and so tear gas is prohibited because it is not properly described by the Protocol. It is unlikely that a consensus between the two interpretations will emerge.

The second approach will involve securing a two-thirds majority in the U.N.G.A. or any other agency of the U.N. It is doubtful whether this can easily come through as it may involve an East-West deadlock. It is reasonable to suppose that the decision or opinion of the I.C.J. would not bear out the contention of all the countries, and may therefore be refused acceptance by some countries not satisfied



with its advisory opinion.

The third option will transfer the dispute to a Conference room. It is unlikely that any common interpretation that will ban tear gas will emerge. The two Draft Resolutions presented by Great Britain and the Soviet Union have only one common aspect, that is the ban on production, development, stockpiling and use in warfare of chemical agents. The Soviet proposal, which includes biological agents, excludes verification proposals recommended by the British Draft Convention. The General Assembly which transferred the two Draft Conventions to the Conference of the Committee of Disarmament (C.C.D.) only transferred to the C.C.D. the East-West dispute on the methodology of dealing with the weapons in question. The present complex situation surrounding tear gas and herbicides will in fact require prolonged discussions to secure an international agreement.

If no compromise emerges on the status of the "tear gas" it is more likely than not that "tear gas" will eventually be a generally accepted weapon of warfare. At the domestic level, the principle of proportionality should be applied to avoid the misuse of chemical agents. What quantity of sprays is necessary to disperse a demonstration? What degree of harm is allowed for such a purpose? And to what extent will the police officer be regarded as inhuman or brutal in the application of the sprays on the rioters? The





police or military officer is, to an extent, placed in the same position as the military commanding officer in an international war.<sup>5</sup> There is no doubt that the misuse of the lachrymatory gas could cause death during civil disturbances. This is possible as the police or military officers often direct the sprays indiscriminantly towards a crowd or groups of people in order to disperse them. In these circumstances, it is virtually impossible to provide prompt medical treatment to the tear gas victims.

Another objection indicated by Page<sup>6</sup> is that in certain situations chemical irritants may not repel assailants, especially those under the influence of drugs or liquor, as well as lunatics and individuals in a state of extreme emotional excitement. Under such conditions, tear gas may escalate, rather than pacify, civil disturbances, or even lead to the use of "countersprays" or other forms of reaction by the demonstrators.<sup>7</sup> Nevertheless, there is the moral challenge to the propriety of indulging in what is, in fact, chemical warfare on the domestic level, when there is much concern over its use internationally. If attempts are made through various protocols to prohibit chemical warfare, why should it be tolerated nationally? Perhaps the most ethical reason against the domestic use of chemical sprays is that their use may invite the introduction of more powerful chemical weapons for real or imagined need.<sup>8</sup> The fact



that many governments including the United States, British and French governments have CS aerosols, which attack respiratory systems, for domestic purposes<sup>9</sup> should invite the concern of those who speak against CBW.

While condemning the use of lachrymatory gases for domestic peace-time operations, it is important to remember that personal injury actions could be filed against law enforcement agencies and/or the manufacturers of the sprays for necessary remedies. This may be necessary where undue injury has been inflicted on the victim by the police. In this way, the tort law, acting through the mechanism of the private suit for money damages can effectuate a limited societal control over the use of tear gas.

Before any claim can be established, the victim will at least have to prove that the tear gas user has committed an actionable battery<sup>10</sup> or an act of negligence.<sup>11</sup> Thus, in Wall v. Zeeb,<sup>12</sup> 1967, it was held that the accidental discharge of a tear gas gun while in the hands of a policeman does not create in itself a presumption of negligence, under the circumstances, where their individual self-preservation requires the use of these weapons.

Opinions of many international statesmen, scholars, and jurists, and the activities of international (humanitarian) organizations (e.g. I.C.R.C. and W.H.O.) and bodies in



different countries (e.g. A.A.A.S. and British Himsworth Committee) whose purpose is restraint on weapons of warfare could help not only in law-creating source of "law of humanity" but also in the securing of the component parts of either customary law of "general principles of law of all civilized nations."<sup>13</sup>



## Footnotes to Conclusion

<sup>1</sup>See chapter 3, pp. 58-63

<sup>2</sup>Schwarzenberger has said that it is possible to argue that the radiation and, in the case of "unclean" nuclear weapons, their fall-out effects:

- (a) make applicable to nuclear weapons, the rules of international customary law by which the use of poison and poisoned weapons is prohibited, as well as Article 23(a) of the Hague Regulations of 1899 and 1907 on Land Warfare and
- (b) the Geneva Protocol on Poisonous Gases and Analogous Materials of 1925, the provisions of which were treated in the post-1919 period as declaratory of existing international law.

Schwarzenberger, The Legality of Nuclear Weapons, op. cit., p. 48

<sup>3</sup>See p. 42 of chapter 2

<sup>4</sup>Current Notes, Department of External Affairs, Australia, May 1970, p. 263

<sup>5</sup>See Joseph A. Page, "Of Mace and Men in Tort Law as a Means of Controlling Domestic Chemical Warfare," The G.L.J. LVII (May, 1969), p. 1241

<sup>6</sup>Ibid., pp. 1245-1246

<sup>7</sup>Ibid., U.S. militants used chemical gas in disturbances at Columbia University. See N.Y. Times, April 18, 1969, p. 28. Also in New Westminster, British Columbia, tear gas was used against 285 penitentiary inmates who were protesting against the death of an Indian inmate, supposed to have been killed by the wardens; they angrily set bonfires in the compound using benches, chairs, and ping pong tables to warm their drenched bodies, and later set fire to a hut containing recreational equipment. See Globe and Mail, August, 10, 1970. p. 4

<sup>8</sup>Page, "Of Mace and Men....," p. 1248

<sup>9</sup>CS is used by over 50 countries to quell domestic riots, and to capture criminals resisting arrests. See Bunn, "Banning Poison, Gas and Germ Warfare...", p. 404





<sup>10</sup>In the absence of a legal privilege to do so a policeman or private citizen who intentionally sprays a person with a liquid chemical or intentionally causes vapours from such a spray to come into contact with a person has committed an actionable battery. See W. Prosser, Tort, 3rd ed. (1964), p. 9

<sup>11</sup>A person unintentionally injured as a direct or indirect result of the use of chemical irritants may be able to recover for negligence, if he can prove that the defendant handled the weapon carelessly, and that such substandard conduct was the legal cause of the harm sustained. Page, "Of Mace and Men....," p. 1257

<sup>12</sup>153, N.W.; 2nd 779 (N.D.), 1967

<sup>13</sup>See Schwarzenberger, "Functions and Foundations of the Laws of War," 44 Archiv fur Rechtsund Sozial Philosophics 1958, p. 351



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